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10-21-99

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF VIRGINIA

CLERK'S OFFICE U.S. DIST. COURT  
AT ROANOKE, VA

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MORGAN E. SCOTT, JR.

BY:

Deputy Clerk

UNITED STATES OF AMERICA, )

Plaintiff, )

v. )

FMC CORPORATION, )

Defendant. )

Civil Action No. 5:99CV00054

CLERK'S OFFICE U.S. DIST. COURT  
AT ROANOKE, VA

FILED

OCT 21 1999

CONSENT DECREE

MORGAN E. SCOTT, JR. CLERK

BY:

DEPUTY CLERK

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IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF VIRGINIA

UNITED STATES OF AMERICA, )

Plaintiff, )

v. )

Civil Action No. \_\_\_\_\_

FMC CORPORATION, )

Defendant. )

CONSENT DECREE

I. BACKGROUND

The United States of America (United States), on behalf of the Administrator of the United States Environmental Protection Agency (EPA), filed a complaint in this matter pursuant to Sections 106 and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9606, 9607.

A. The United States in its complaint seeks, inter alia: (1) reimbursement of costs incurred by EPA and the Department of Justice for response actions at the Avtex Fibers Superfund Site (Site) in Front Royal, Virginia together with accrued interest; and (2) performance of studies and response work by FMC Corporation (FMC) at the Site consistent with the National Contingency Plan, 40 C.F.R. Part 300 (NCP).

B. In accordance with the NCP and Section 121(f)(1)(F) of CERCLA, 42 U.S.C. § 9621(f)(1)(F), EPA notified the Commonwealth of Virginia (the State) of negotiations with potentially responsible parties regarding the implementation of the remedial design and remedial

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action for the Site, and EPA has provided the State with an opportunity to participate in such negotiations.

C. In accordance with Section 122(j)(1) of CERCLA, 42 U.S.C. § 9622(j)(1), on July 22, 1997, EPA notified the U.S. Department of Interior of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal trusteeship and encouraged the trustee to participate in the negotiation of this Consent Decree.

D. FMC Corporation (FMC) does not admit any liability to the United States arising out of the transactions or occurrences alleged in the complaint, nor does it acknowledge that the release or threatened release of hazardous substances at or from the Site constitutes an imminent or substantial endangerment to the public health or welfare or the environment.

E. (a) The Site is located in Front Royal, Virginia. Attached hereto as Appendix A is a map of the Site. The Site is a closed fibers manufacturing plant. Over the course of approximately 50 years, the plant was used to manufacture fibers such as rayon, polyester, and polypropylene. Situated along the east bank of the South Fork of the Shenandoah River (River), the facility occupies approximately 440 acres. A private school is located along the eastern property boundary. Residential areas are to the east, south and north property boundaries.

The Site property is bisected by the Norfolk Southern Railway Company railroad (the Norfolk-Southern) which separates the plant production area from the former waste disposal areas. The plant area occupies approximately 200 acres east of the railroad tracks whose features included approximately 60 acres of manufacturing and administrative buildings, tank storage areas, open fields and parking lots. The area west of the railroad tracks, encompassing

approximately 240 acres, includes 23 impoundments and fill areas, and a wastewater treatment plant (WWTP). A groundwater plume from the impoundment area extends under the River and beneath some property on the west bank of the South Fork of the River (Rivermont Acres).

Operations at the Site began in 1940, when American Viscose opened a rayon production plant. In 1963, American Viscose sold the plant and property to FMC Corporation (FMC), and in 1976, the plant and property were sold by FMC to Avtex Fibers, Inc. (Avtex). In November 1989, Avtex shut down the plant and shortly thereafter declared bankruptcy.

The plant manufacturing operations generated three major waste types. The first type was generated when the waste acid from the production process was treated with lime in the WWTP; the sludge generated by that treatment was placed in six sulfate basins. The second waste type was the fly ash generated from the combustion of coal in the on-Site power plant. Fly ash was disposed in four impoundments and one stockpile. The third waste type was waste viscose that was disposed in eleven on-site viscose basins. The waste viscose was primarily an off-specification product from the production process. In addition, solid wastes were placed in a solid waste landfill.

(b) In response to a release or a substantial threat of a release of hazardous substances at or from the Site, EPA commenced or administratively ordered various parties to commence response actions and investigations at the Site.

1. Pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA placed the Site on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, on June 10, 1986 (51 Fed. Reg. 2107).

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2. EPA entered into a Consent Order, Docket No. III-86-15-DC, with Avtex Fibers, Inc. and Avtex Fibers - Front Royal, Inc. (collectively Avtex) on August 11, 1986, for performance of a Remedial Investigation and Feasibility Study (RI/FS) for a limited area of the Site. The RI/FS was to investigate the impacts of the viscose disposal basins on the groundwater. EPA amended the Consent Order, Docket No. III-86-15-DC, on January 6, 1988, to include FMC as a party. The August 1988 RI/FS documented the presence of carbon disulfide, cadmium, lead, hydrogen sulfide, and arsenic in groundwater sampled at the Site. Carbon disulfide and arsenic were also identified in groundwater on the west side of the Shenandoah River. Constituents detected in the viscose materials on Site included arsenic, cadmium, carbon disulfide, lead and zinc.

3. On September 30, 1988, EPA issued a Record of Decision (ROD) for Operable Unit 1 (OU-1), which addressed groundwater contamination caused by leaching of fluids from viscose basins 9, 10, and 11. EPA issued a Unilateral Administrative Order (UAO), Docket No. III-89-19-DC, on June 30, 1989, to Avtex and FMC for implementation of the remedial action chosen in the ROD for OU-1. Thereafter, EPA suspended the UAO having determined that additional information was necessary concerning subsurface conditions at the Site before a groundwater remedy could be implemented.

4. On October 31, 1989, EPA issued a UAO, Docket No. III-90-01-DC, to Avtex ordering it to conduct a removal action at the Site. Actions required by the UAO included the following: a plan to sample the entire Site to identify the scope of PCB contamination at the Site; a plan to identify, segregate, and dispose of hazardous substances, including drummed wastes and certain PCB-contaminated areas; an outline and subsequent study to determine potential

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releases from Site operations, processes, areas, or systems; a health and safety plan under which the work was to be implemented; a plan to provide site security; and a fire protection plan. On November 9, 1989, shortly after the UAO was issued, the State revoked Avtex's National Pollutant Discharge Elimination System (NPDES) permit. Avtex informed EPA on November 10, 1989, that it could not comply with the UAO, and Avtex shut down the plant.

5. On or about November 11, 1989, EPA initiated an emergency removal action at the Site. The removal operation included an imminent hazard evaluation; establishment of site security; design and operation of the waste water treatment system; return of raw chemicals to suppliers; disposal of lab pack chemicals, flammable chemicals, and short-life chemicals; decommissioning of 22 carbon disulfide impoundments; and draining, flushing, and on-site treatment of various process line, tank, and vessel fluids.

6. On February 2, 1990, EPA issued a UAO, Docket No. III-90-12-DC (WWTP UAO), ordering FMC to operate the WWTP at the Site in order to maintain freeboard levels in sulfate basins 1 through 4, 4E, and the emergency lagoon.

7. On September 28, 1990, EPA issued the second ROD for the Site, which required several accelerated remedial actions. This second ROD was broken down into the following operable units: OU-2 was for the excavation and removal of PCB-contaminated soils; OU-3 was for the demolition of the acid reclaim facility; OU-4 required site security; and OU-5 required the sampling, identification, and disposal of drums of hazardous substances.

8. On October 22, 1991, EPA issued a UAO, Docket No. III-91-48-DC (Rivermont UAO), to FMC requiring it to provide alternate water to residents in Rivermont Acres, a residential subdivision on the west side of the Shenandoah River.

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9. Physical on-site construction of the remedial work designated as OU-2 has been completed. The work included excavation and off-site disposal of PCB-contaminated soils.

10. EPA performed site security under OU-4 and the demolition of the acid reclaim facility under OU-3. Physical on-site demolition of the acid reclaim facility has been completed.

11. In September 1994, EPA completed work designated as OU-5. Approximately 2,879 drums of waste were disposed of off-site.

12. On March 30, 1993, EPA and FMC signed a Consent Order, Docket No. III-93-14 (RI/FS Consent Order), which required FMC to complete a portion of a second RI/FS for the Site. The balance of the second RI/FS for the Site is being conducted by EPA. The RI/FS Consent Order covered the following areas: investigation of the viscose basins, sulfate basins, WWTP lagoons and residuals, fill area and fly ash piles, on-site/off-site groundwater, and on-site soils.

13. In accordance with the terms of the RI/FS Consent Order, FMC investigated the redevelopment priority Areas A, B (currently referred to as Parcel 2B), and C (currently referred to as Parcel 2A) (identified on the attached Appendices A and B) at the Site. This work was designated as OU-8.

14. The portion of the RI/FS being performed by EPA covers the following areas: the investigation of buildings on-site (OU-6); river and ecological investigation and risk assessment (OU-9); and investigation of off-site soils, a ballfield and the sewers (OU-10).

15. In or before October 1996, EPA began removal activities on certain buildings and structures at the Avtex plant. This removal action involves demolition of some of the

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buildings on-site, decontamination of certain buildings, and treatment and disposal of debris and waste. A substantial portion of this work, including demolition of approximately 17 acres of buildings, has been completed.

16. On or about October 16, 1998, EPA issued the Second Modification to the WWTP UAO, Docket No. III-90-12-DC, ordering FMC to perform stabilization activities at the Site. The removal activities under the Second Modification to the WWTP UAO, Docket No. III-90-12-DC, include, among other things, erosion and sedimentation control, and management of waste piles and debris.

17. In Removal Action Memoranda and RODs, EPA will select response actions for the Removal Action - Basins, the Removal Action - Buildings and Remedial Actions (defined below) in accordance with CERCLA.

F. Based on the information presently available to EPA, EPA believes that the Work will be properly and promptly conducted by FMC if conducted in accordance with the requirements of this Consent Decree and its appendices.

G. Solely for the purposes of Section 113(j) of CERCLA, the Work selected or to be selected by EPA, and the work to be performed by FMC, shall constitute a response action taken or ordered by the President.

H. The United States represents that it is EPA Region III's general practice in the development of CERCLA remedies to assume future industrial use for property, such as the Site, which is or has been subject to industrial use. In May 1998, North American Realty Advisory Services (North American) completed a study of the future land use at the Site, which has been adopted by Warren County. The North American study is the best available information on

future land use at the Site, and EPA assumes that future use of the Site will be commercial, industrial, recreational or conservation use, consistent with this study. A map of future land use adapted from the North American study is attached as Appendix B. EPA reserves the right, however, to consider other uses in an RI/FS or a future ROD subject to this Consent Decree, if EPA determines, on the basis of new information obtained by EPA in whole or in part after the date of lodging of this Consent Decree, which could not have been obtained prior to lodging, that it would be appropriate under the NCP to consider uses other than commercial, industrial, recreational or conservation for the Site.

I. The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and implementation of this Consent Decree will expedite the cleanup of the Site and will avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, it is hereby Ordered, Adjudged, and Decreed:

## **II. JURISDICTION**

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1345, and 42 U.S.C. §§ 9606, 9607, and 9613(b). This Court also has personal jurisdiction over FMC with respect to this action. Solely for the purposes of this Consent Decree and the underlying complaint, FMC waives all objections and defenses that it may have to jurisdiction of the Court or to venue in this District. FMC shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree.

### III. PARTIES BOUND

2. This Consent Decree applies to and is binding upon the United States and upon FMC and its successors and assigns. Any change in ownership or corporate status of FMC including, but not limited to, any transfer of assets or real or personal property, shall in no way alter FMC's responsibilities under this Consent Decree.

3. Within 10 days after lodging of this Consent Decree, FMC shall provide a copy of this Consent Decree to each contractor hired to perform the Work (as defined below) required by this Consent Decree and to each person representing FMC with respect to the Site or the Work and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this Consent Decree. FMC or its contractors shall provide written notice of the Consent Decree to all subcontractors hired to perform any portion of the Work required by this Consent Decree. FMC shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work contemplated herein in accordance with this Consent Decree. With regard to the activities undertaken pursuant to this Consent Decree, each contractor and subcontractor shall be deemed to be in a contractual relationship with FMC within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

### IV. DEFINITIONS

4. Unless otherwise expressly provided herein, terms used in this Consent Decree which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Consent Decree or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

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"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 - 9675.

"Consent Decree" shall mean this Decree and all appendices attached hereto (listed in Section XXX). In the event of conflict between this Decree and any appendix, this Decree shall control.

"Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

"EE/CA" shall mean an Engineering Evaluation/Cost Analysis document approved by EPA which analyzes removal action alternatives for the Removal Action - Buildings and Removal Action - Basins as required by the NCP at 40 C.F.R. § 300.415(b)(4)(1).

"EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

"FMC" shall mean defendant FMC Corporation.

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States or FMC shall pay or incur after entry of this Consent Decree by the Court, at or in connection with the Work at the Site (as defined below). As to the United States, this term includes, but is not limited to, costs that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Consent Decree, verifying the Work, or otherwise implementing, overseeing, or enforcing this Consent Decree, including, but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to

Sections VIII, X (including, but not limited to, the cost of attorney time and any monies paid to secure access and/or to secure or implement institutional controls including, but not limited to, the amount of just compensation), XVI, and Paragraph 104 of Section XXII. Notwithstanding the preceding sentences of this Section, Future Response Costs shall not include costs incurred by the United States in reviewing or developing plans, reports or other items pursuant to the RI/FS Consent Order identified in Section I, Paragraph E.12.

"Interim Response Costs" shall mean all costs, including direct and indirect costs, and including costs of EPA's Recycling Superfund Sites Initiative (a) paid by the United States in connection with the Site between September 30, 1998, and entry of this Consent Decree, or (b) incurred prior to, but paid after entry of this Consent Decree.

"Interest" shall mean interest at the rate specified for interest on investments of the Hazardous Substance Superfund established under Subchapter A of Chapter 98 of Title 26 of the U.S. Code, compounded on October 1 of each year, in accordance with 42 U.S.C. § 9607(a).

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"Operation and Maintenance" or "O & M" shall mean all activities required to maintain the effectiveness of a response action as required under an Operation and Maintenance Plan approved or developed by EPA pursuant to this Consent Decree.

"Operable Unit" or "OU" shall mean any discrete geographical area, media, or type of contamination, as designated by EPA, that lends itself to efficient study or cleanup separate from other geographical areas, media, or types of contamination.

"Operable Unit 7" or "OU-7" shall mean the portion of the Work for remedial actions for Viscose Basins 9-11, groundwater and surface water.

"OU-7 ROD" or "ROD 5" shall mean a future EPA ROD, which will select the remedial action to be implemented as OU-7 to be signed by the Regional Administrator, EPA Region III, or his/her delegate, and all attachments thereto.

"Operable Unit 10" or "OU-10" shall mean the portion of the Work for remedial actions for Viscose Basins 1-8, the New Landfill, the Waste Water Treatment Plant closure and soils.

"OU-10 ROD" or "ROD 4" shall mean a future EPA ROD, which will select the remedial action to be implemented as OU-10 to be signed by the Regional Administrator, EPA Region III, or his/her delegate, and all attachments thereto.

"Paragraph" shall mean a portion of this Consent Decree identified by an arabic numeral or an upper case letter.

"Parties" in this Consent Decree shall mean the United States and FMC.

"Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through September 30, 1998, plus interest on all such costs which has accrued pursuant to 42 U.S.C. § 9607(a) through September 30, 1998.

"Performance Standards-Remedial" shall mean the cleanup standards and other measures of achievement of the goals of the Remedial Actions for OU-7 and OU-10 that will be contained in ROD 4 and ROD 5 and any modified standards established by EPA, in a manner consistent with the land use assumptions described in Section I, Paragraph H.

**"Performance Standards-Removal"** shall mean the measures of achievement of the **Removal Action - Buildings** and the **Removal Action - Basins** that are selected by EPA in the work sections (Section VI) of the Removal Action Memoranda and the EPA-approved Response Action Plans (RAPs) for those removal response actions, and those modifications made by Pollution Reports (Polreps) Nos. 817, 865, and 888, and any subsequent modifications made pursuant to this Consent Decree, in a manner consistent with the land use assumptions described in Section I, Paragraph H.

**"Plaintiff"** shall mean the United States.

**"RCRA"** shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901 - 6992k (also known as the Resource Conservation and Recovery Act).

**"Record of Decision" or "ROD"** shall mean the EPA Record of Decision relating to an Operable Unit specified by that ROD for the Site signed by the Regional Administrator, EPA Region III, or his/her delegate, and all attachments thereto.

**"Remedial Action" or "Remedial Actions"** shall mean those activities, except for Operation and Maintenance, to be undertaken by FMC to implement one or more RODs, in accordance with the final Remedial Design and Remedial Action Work Plans and other plans approved by EPA.

**"Remedial Action Work Plan"** shall mean the document developed pursuant to Section VII (Performance of the Work by FMC) of this Consent Decree and approved by EPA, and any amendments thereto.



**"Remedial Design"** shall mean those activities to be undertaken by FMC to develop the final plans and specifications for implementation of the Remedial Action pursuant to the Remedial Design Work Plan for that specific ROD.

**"Remedial Design Work Plan"** shall mean the document(s) developed pursuant to Section VII (Performance of the Work by FMC) of this Consent Decree and approved by EPA, and any amendments thereto for that specific ROD.

**"Removal Action" or "Removal Actions"** shall mean those activities, except for Operation and Maintenance, to be undertaken by FMC to implement the EPA Removal Action Memoranda and the EPA-approved Response Action Plans.

**"Removal Action - Basins"** shall mean the removal activities for Sulfate Basins 1-5, the Fly Ash Units, the Waste Water Treatment Plant Polishing Basins, and the Emergency Lagoon at the Site. Except as otherwise expressly provided in this Consent Decree, "Removal Action - Basins" does not include Operation and Maintenance.

**"Removal Action - Buildings"** shall mean the time-critical removal action for the disposal of certain building demolition debris and wastes accumulated and generated, the decommissioning of three carbon disulfide tanks and the removal of solids, liquids and one sewer line from within or connected to foundations and subgrade structures remaining within the 17 acres of buildings demolished by EPA, including the stabilization, control and monitoring of any migration of hazardous substances (all as more particularly identified in Paragraph 21 below) and the non-time critical removal action for the disposal of metal scrap from building demolition, the chemical decontamination of remaining buildings and structures, the performance of the selected response action to address the migration of hazardous substances related to remaining

foundations and subgrade structures and the performance of the selected response action for the sewers (all as more particularly identified in Paragraph 21.A below). Except as otherwise expressly provided in this Consent Decree, "Removal Action - Buildings" does not include Operation and Maintenance. Further, "Removal Action - Buildings" does not include non-CERCLA work relating to remaining buildings, foundations, above-grade and subgrade structures, particularly the removal of asbestos-containing material and lead paint and demolition and disposal work which is to be paid for by either the Industrial Development Authority of the Town of Front Royal and the County of Warren (Economic Development Authority), the Town of Front Royal or Warren County, Virginia.

"Removal Action Memorandum" shall mean the EPA written record of its decision to select a removal action at the Site.

"Response Action Plan" or "RAP" shall mean an EPA-approved plan for performance of a removal action.

"Section" shall mean a portion of this Consent Decree identified by a roman numeral.

"Site" shall mean the Avtex Fibers Superfund Site, encompassing approximately 440 acres, located on Kendrick Lane in Front Royal, Virginia, and depicted generally on the map attached as Appendix A.

"State" shall mean the Commonwealth of Virginia.

"Supervising Contractor" shall mean the principal contractor retained by FMC to supervise and direct the implementation of the Work for any given response action under this Consent Decree.

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"Trustee" means Anthony H. Murray, Jr., Inc., the bankruptcy trustee of the debtor, Avtex Fibers-Front Royal, Inc., who was appointed as such on or about April 12, 1990 by the United States Bankruptcy Court. The debtor, Avtex Fibers-Front Royal, Inc., is the owner of record of the Site property.

"United States" shall mean the United States of America.

"Waste Material" shall include (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33), 42 U.S.C. § 9601(33); or (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

"Work" shall mean all activities (including operation and maintenance) FMC is required to perform or elects to perform under this Consent Decree, except those required by Section XXVI (Retention of Records). Work can also refer to the activities of a single removal action or a single OU if such a limitation is specified in the text of this Consent Decree.

## **V. GENERAL PROVISIONS**

5. **Objectives of the Parties.** The objectives of the Parties in entering into this Consent Decree are to protect public health or welfare or the environment at the Site by the design and implementation of response actions at the Site by FMC, to reimburse response costs of the United States, and to resolve the claims of EPA against FMC as provided in this Consent Decree.

6. **Commitments by FMC.** FMC shall finance and perform the Work in accordance with this Consent Decree, the Removal Action Memoranda, the Response Action Plans, the RODs and all work plans and other plans, standards, specifications, and schedules set forth herein or developed by FMC and approved by EPA pursuant to this Consent Decree. FMC shall also

reimburse the United States for Past Response Costs, Interim Response Costs and Future Response Costs as provided in this Consent Decree.

7. Compliance With Applicable Law. All activities undertaken by FMC pursuant to this Consent Decree shall be performed in accordance with the requirements of all applicable federal and state laws and regulations. FMC must also comply with all applicable or relevant and appropriate requirements of all federal and state environmental laws, including but not limited to, those requirements set forth in the Removal Action Memoranda, the EPA-approved EE/CAs, the EPA-approved Response Action Plans and the RODs. The activities conducted by FMC pursuant to this Consent Decree, if approved by EPA, shall be considered to be consistent with the NCP.

8. Permits.

a. As provided in Section 121(e) of CERCLA and Section 300.400(e) of the NCP, no permit shall be required for any portion of the Work conducted entirely on-site (i.e., within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work). Where any portion of the Work that is not on-site requires a federal or state permit or approval, FMC shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

b. FMC may seek relief under the provisions of Section XIX (Force Majeure) of this Consent Decree for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit required for the Work.

c. This Consent Decree is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

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9. Notice of Obligations to Successors-in-Title.

a. Within 15 days after the entry of this Consent Decree, FMC shall record, or use its best efforts to have the Trustee of the Avtex Site property record, a certified copy of this Consent Decree with the Clerk's Office (or other appropriate offices where land ownership and transfer records are maintained for the Site property) in Warren County, Virginia. Thereafter, each deed, title, or other instrument conveying an interest in the property included in the Site shall contain a notice stating that the property is subject to this Consent Decree and shall reference the recorded location of the Consent Decree and any restrictions applicable to the property under this Consent Decree.

b. The obligations with respect to the provision of access and the implementation of institutional controls under Section X (Access and Institutional Controls) shall be binding upon any and all persons who acquire any such interest or portion thereof (hereinafter "Successor-in-Title"). Within 15 days after the entry of this Consent Decree, FMC shall record, or use its best efforts to have the Trustee of the Avtex Site property record, at the Clerk's Office (or other appropriate offices where land ownership and transfer records are maintained for the Site property), in Warren County, Virginia, a notice of obligation to provide access under Section X (Access and Institutional Controls) and related covenants, if any. Each subsequent instrument conveying an interest to any such property included in the Site shall reference the recorded location of such notice and covenants applicable to the property.

c. Any Successor-in-Title shall, at least 30 days prior to the conveyance of any such interest, give written notice of this Consent Decree to the grantee and written notice to EPA of the proposed conveyance, including the name and address of the grantee, and the date on

which notice of the Consent Decree was given to the grantee. In no event shall the conveyance of an interest in property that includes, or is a portion of, the Site release or otherwise affect the liability of FMC to comply with the Consent Decree.

#### **VI. IMPLEMENTATION OF REMOVAL ACTIONS AND REMEDIAL ACTIONS**

10. **Site Stabilization.** FMC shall continue to comply with the Second Modification to UAO III-90-12-DC (attached as Appendix C) and perform all work required under the Second Modification to UAO III-90-12-DC in accordance with the terms of the UAO until such time as the UAO is superseded by this Consent Decree pursuant to this Paragraph. If EPA determines that FMC is in full compliance with the terms and obligations of the UAO as of the date of entry of this Consent Decree, the work requirements set forth in the Second Modification to UAO III-90-12-DC shall be incorporated into this Consent Decree, and this Consent Decree shall supersede the Second Modification to UAO III-90-12-DC upon entry of the Consent Decree, with respect to all unfulfilled obligations in the UAO. If EPA determines that FMC is not in full compliance with the terms and obligations of the Second Modification to UAO III-90-12-DC as of the date of entry of this Consent Decree, the requirements set forth in the Second Modification to UAO III-90-12-DC shall remain in full force and effect until EPA's subsequent determination that FMC has achieved full compliance with the terms and conditions of the Second Modification to UAO III-90-12-DC at which time this Consent Decree shall supersede the UAO. If this Consent Decree is not entered by the Court, the Second Modification to UAO III-90-12-DC shall not be superseded, and FMC shall perform all work required under the Second Modification to UAO III-90-12-DC except to the extent that FMC is relieved of its obligation to perform such work by written notice from EPA. Any documents that are required to be

submitted under the terms of this Consent Decree that have been submitted by FMC pursuant to the Second Modification to UAO III-90-12-DC need not be resubmitted after the date that this Consent Decree supersedes the Second Modification to UAO III-90-12-DC, unless EPA determines that such submittal is inadequate. Nothing in this Consent Decree shall be deemed to bar the United States from enforcing the Second Modification to UAO III-90-12-DC against FMC as of the date of entry of this Consent Decree. EPA may seek penalties or punitive damages pursuant to Sections 106(b) and 107(c)(3) of CERCLA, 42 U.S.C. §§ 9606(b) and 9607(c)(3), with respect to violations of the Second Modification to UAO III-90-12-DC occurring prior to the date that the UAO is superseded by this Consent Decree at any time, including after the date that the UAO has been superseded by this Consent Decree, notwithstanding any correction of such violations. Within 20 days of the date FMC concludes it has completed implementation of the Supplemental Work Plan for the Second Modification to UAO III-90-12-DC, FMC shall submit a written Final Report to EPA, which shall be in accordance with the provisions of Paragraph 45.B. of Section XI (Reporting Requirements). FMC shall continue to perform the work required by this Paragraph until written approval by EPA of the Final Report for the Supplemental Work Plan for the Second Modification to UAO III-90-12-DC and written notice is given by EPA to FMC that the work required by the Second Modification to UAO III-90-12-DC is complete, or until such earlier time as FMC demonstrates to EPA and EPA agrees at its sole discretion that FMC's obligations under this Paragraph shall be modified or terminated.

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**11.A. Operation of the Wastewater Treatment Plant.**

FMC shall continue to operate the WWTP at the Site in compliance with UAO III-90-12-DC (attached as Appendix C) and perform all work required under UAO III-90-12-DC in accordance with the terms of the UAO until such time as this Consent Decree is entered. Upon entry of this Decree, the work requirements set forth in Paragraphs 8.2 - 8.5, 8.8 and 8.11- 8.12 of the UAO shall become incorporated as provisions of this Consent Decree, and this Consent Decree, including the provisions of Section XI (Reporting Requirements), Section XII (EPA Approval of Plans and Other Submissions) and Section XXV (Access to Information), shall supersede UAO III-90-12-DC upon entry of the Consent Decree with respect to all subsequent obligations. If this Consent Decree is not entered by the Court, UAO III-90-12-DC shall not be superseded and FMC shall perform all work required under UAO III-90-12-DC except to the extent that FMC is relieved of its obligation to perform such work by written notice from EPA. Any documents that are required to be submitted under the terms of this Consent Decree that have been submitted by FMC pursuant to UAO III-90-12-DC need not be resubmitted after the date that this Consent Decree supersedes UAO III-90-12-DC, unless EPA determines that such submittal is inadequate. Nothing in this Consent Decree shall be deemed to bar the United States from enforcing UAO III-90-12-DC against FMC as of the date of entry of this Consent Decree. EPA may seek penalties or punitive damages pursuant to Sections 106(b) and 107(c)(3) of CERCLA, 42 U.S.C. §§ 9606(b) and 9607(c)(3), with respect to violations of UAO III-90-12-DC occurring prior to the date that the UAO is superseded by this Consent Decree at any time, including after the date that the UAO has been superseded by this Consent Decree, notwithstanding any correction of such violations. Within 20 days of the date FMC concludes it



has completed implementation of the Work Plan for UAO III-90-12-DC, FMC shall submit a written Final Report to EPA, which shall be in accordance with the provisions of Paragraph 45.B. of Section XI (Reporting Requirements). FMC shall continue to operate the WWTP as required by this Paragraph until FMC certifies completion of the OU-10 Remedial Action under ROD 4 or until such earlier time as FMC demonstrates to EPA and EPA agrees at its sole discretion that FMC's obligations under this Paragraph shall be modified or terminated.

**11.B. Provision of Alternate Water (The Rivermont UAO).**

FMC shall continue to provide alternate water to residents of Rivermont Acres in compliance with UAO III-91-48-DC (attached as Appendix D) and perform all work required under UAO III-91-48-DC in accordance with the terms of the UAO until such time as this Consent Decree is entered. Upon entry of this Decree, the work requirements set forth in Paragraphs 8.3(a), 8.7 and 8.8 of the UAO shall become incorporated as provisions of this Consent Decree, and this Consent Decree shall supersede UAO III-91-48-DC upon entry of the Consent Decree with respect to all subsequent obligations. If this Consent Decree is not entered by the Court, UAO III-91-48-DC shall not be superseded and FMC shall perform all work required under UAO III-91-48-DC except to the extent that FMC is relieved of its obligation to perform such work by written notice from EPA. Any documents that are required to be submitted under the terms of this Consent Decree that have been submitted by FMC pursuant to UAO III-91-48-DC need not be resubmitted after the date that this Consent Decree supersedes UAO III-91-48-DC, unless EPA determines that such submittal is inadequate. Nothing in this Consent Decree shall be deemed to bar the United States from enforcing UAO III-91-48-DC against FMC as of the date of entry of this Consent Decree. EPA may seek penalties or punitive

damages pursuant to Sections 106(b) and 107(c)(3) of CERCLA, 42 U.S.C. §§ 9606(b) and 9607(c)(3), with respect to violations of UAO III-91-48-DC occurring prior to the date that the UAO is superseded by this Consent Decree at any time, including after the date that UAO has been superseded by this Consent Decree, notwithstanding any correction of such violations.

FMC shall include a report on its provision of alternate water as required by this Paragraph in the first monthly progress report submitted under Paragraph 45 and in each fourth monthly progress report thereafter. FMC shall continue to provide alternate water as required by this Paragraph until FMC certifies completion of the OU-7 Remedial Action under ROD 5 or until such earlier time as FMC demonstrates to EPA and EPA agrees at its sole discretion that FMC's obligations under this Paragraph shall be modified or terminated.

**11.C. The Viscose Basins 9, 10, and 11 UAO.**

Upon entry of this Decree, this Consent Decree shall supersede UAO III-89-19-DC (the Viscose Basins 9, 10, and 11 UAO, which is described in Section I, Paragraph E.b.3.) and FMC shall have no further obligations under that administrative order.

**12. Site Security and Site Management.**

Pursuant to the provisions of this Consent Decree, FMC shall develop, perform, pay for and implement an EPA-approved plan for site security and site management to be implemented by FMC during the time FMC is conducting the EPA-selected response actions required pursuant to the terms of this Consent Decree.

**13. The Removal Action - Buildings.**

a. Pursuant to the provisions of this Consent Decree, FMC shall perform, pay for and implement the Removal Action - Buildings, which shall be in accordance with the Removal

Action Memoranda for the Removal Action - Buildings and the EPA-approved Response Action Plans for the Removal Action - Buildings as described in Paragraph 21 of this Consent Decree; provided, however, that the obligation of FMC to perform, pay for and implement the response action for the sewers, which will be selected in the Removal Action Memorandum for the non-time critical items of the Removal Action - Buildings, shall be subject to the provisions of Paragraphs 13.b. and 13.c below.

b. FMC shall perform, pay for and implement the selected response action for the sewers unless:

i. the response action for the sewers selected in the Removal Action Memorandum for the Removal Action - Buildings, including Operation and Maintenance and including any response action selected in the Removal Action Memorandum for soils associated with the sewers, is estimated in the Removal Action Memorandum to cost more than \$2.7 million, as computed in third calendar year quarter 1998 dollars pursuant to the method specified in Paragraph 13.d.; or

ii. the response action for the sewers selected in the Removal Action Memorandum for the Removal Action - Buildings is not based on an assumption that future land use for the those portions of the Site addressed by the response action selected for the sewers will be commercial, industrial, recreational or conservation use as set forth in Appendix B.

c. In the event that either of the conditions in Paragraph 13.b.i. or 13.b.ii. exists with respect to the response action for the sewers selected in the Removal Action Memorandum, then the United States and FMC shall confer, and FMC shall have 60 days from the date of

issuance of the Removal Action Memorandum for the Removal Action - Buildings in which to provide the United States with a written election:

- i. to perform the response action selected for the sewers under the terms of this Consent Decree which are otherwise applicable to performance of the response action; or
- ii. to decline performance of the response action selected for the sewers in the Removal Action Memorandum for the Removal Action - Buildings in which case the United States reserves whatever legal and equitable response, cost recovery and other authorities it may have against FMC with respect to the response action for the sewers, and FMC reserves whatever rights and defenses it may have with respect thereto.

d. Cost estimates for the response action selected for the sewers in the Removal Action Memorandum for the Removal Action - Buildings, the Removal Action Memorandum for the Removal Action - Basins, ROD 4 and ROD 5 shall be computed to third calendar year quarter 1998 dollars by multiplying any such cost estimate by a fraction (1) the numerator of which shall be 112.80, which is the number of the Chain-type Price Index for the third calendar year quarter 1998 in Table 7.1 (Quantity and Price Indexes for Gross Domestic Product), Survey of Current Business, December 1998 Issue, Bureau of Economic Analysis, Department of Commerce; and (2) the denominator of which shall be the number of the Chain-type Price Index for the calendar year quarter in which the cost estimates in the Removal Action Memorandum or ROD were prepared (which, for purposes of this Paragraph, shall be the date of the EE/CA or Feasibility Study upon which the Removal Action Memorandum or ROD is based), as published in Table 7.1 (Quantity and Price Indexes for Gross Domestic Product), Survey of Current Business, Last Issue before the date of the EE/CA or Feasibility Study, Bureau of Economic

Analysis, Department of Commerce. If the Chain-type Price Index is no longer published, the closest equivalent Gross Domestic Product price index shall be used in both the numerator (third calendar year quarter 1998) and the denominator (calendar year quarter of the date of the EE/CA or Feasibility Study containing the cost estimate.)

e. The components of the cost estimates for the response action selected for the sewers in the Removal Action Memorandum for the Removal Action - Buildings, the Removal Action Memorandum for the Removal Action - Basins, ROD 4 and ROD 5 shall be not inconsistent with the currently applicable EPA guidance for estimating costs of response actions.

f. The cost estimate thresholds set forth in Paragraphs 13.b.i., 14.a.i., 15.a.i. and 16.a.i. may be modified by the mutual agreement, in writing, of the Parties.

14. The Removal Action - Basins.

a. Pursuant to the provisions of this Consent Decree, FMC shall perform, pay for and implement the Removal Action - Basins in accordance with the Removal Action Memorandum for the Removal Action - Basins and the EPA-approved Response Action Plan for the Removal Action - Basins unless:

i. the response action selected in the Removal Action Memorandum for the Removal Action - Basins, including Operation and Maintenance, is estimated in the Removal Action Memorandum to cost more than \$17.5 million, as computed in third calendar year quarter 1998 dollars pursuant to the method specified in Paragraph 13.d.; or

ii. the response action selected in the Removal Action Memorandum for the Removal Action - Basins is not based on an assumption that future land use for those portions

of the Site addressed by the Removal Action - Basins will be recreational or conservation use as set forth in Appendix B.

b. In the event that either of the conditions in Paragraph 14.a.i. or 14.a.ii. exists with respect to the response action selected in the Removal Action Memorandum, then the United States and FMC shall confer, and FMC shall have 60 days from the date of issuance of the Removal Action Memorandum for the Removal Action - Basins in which to provide the United States with a written election:

i. to perform the response action under the terms of this Consent Decree which are otherwise applicable to performance of the response action; or

ii. to decline performance of the selected response action in the Removal Action Memorandum for the Removal Action - Basins in which case the United States reserves whatever legal and equitable response, cost recovery and other authorities it may have against FMC with respect to the Removal Action - Basins, and FMC reserves whatever rights and defenses it may have with respect thereto.

15. The OU-7 ROD - Viscose Basins 9-11, Groundwater and Surface Water.

a. Pursuant to the provisions of this Consent Decree, FMC shall perform, pay for and implement an OU-7 remedy unless:

\_\_\_\_\_ i. the remedy selected in the OU-7 ROD, including Operation and Maintenance, is estimated in the OU-7 ROD to cost more than \$13.0 million, as computed in third calendar year quarter 1998 dollars pursuant to the method specified in Paragraph 13.d.; or

ii. the remedy selected in the OU-7 ROD is not based on an assumption that future land use for those portions of the Site addressed by OU-7 will be recreational or conservation use as set forth in Appendix B.

b. In the event that either of the conditions in Paragraph 15.a.i. or 15.a.ii exists with respect to the remedy selected in the OU-7 ROD, then the United States and FMC shall confer, and FMC shall have 60 days from the date of issuance of the OU-7 ROD in which to provide the United States with a written election:

i. to perform the remedy under the terms of this Consent Decree which are otherwise applicable to performance of the remedy; or

ii. to decline performance of the selected remedy for the OU-7 ROD, in which case the United States reserves whatever legal and equitable response, cost recovery and other authorities it may have against FMC with respect to the OU-7 ROD, and FMC reserves whatever rights and defenses it may have with respect thereto.

16. The OU-10 ROD - Viscose Basins 1-8, New Landfill, Wastewater Treatment Plant Closure and Soils.

a. Pursuant to the provisions of this Consent Decree, FMC shall perform, pay for and implement an OU-10 remedy unless:

i. the remedy selected in the OU-10 ROD, including Operation and Maintenance, is estimated in the OU-10 ROD to cost more than \$7.8 million, as computed in third calendar year quarter 1998 dollars pursuant to the method specified in Paragraph 13.d.; or

ii. the remedy selected in the OU-10 ROD is not based on an assumption that future land use for those portions of the Site addressed by OU-10 will be commercial, industrial, recreational or conservation use as set forth in Appendix B.

b. In the event that either of the conditions in Paragraph 16.a.i. or 16.a.ii exists with respect to the remedy selected in the OU-10 ROD, then the United States and FMC shall confer, and FMC shall have 60 days from the date of issuance of the OU-10 ROD in which to provide the United States with a written election:

i. to perform the remedy under the terms of this Consent Decree which are otherwise applicable to performance of the remedy; or

ii. to decline performance of the selected remedy for the OU-10 ROD, in which case the United States reserves whatever legal and equitable response, cost recovery and other authorities it may have against FMC with respect to the OU-10 ROD, and FMC reserves whatever rights and defenses it may have with respect thereto.

17. The Parties recognize that the remedies for OU-7 and OU-10 may be selected by EPA in separate RODs or in a single ROD, that the remedies for the OUs may be performed separately or together and that, if performed together, the deliverables to be provided by FMC to EPA may, with the prior approval of EPA, be combined into single deliverables for OU-7 and OU-10.

18.A. EPA agrees that if the Town of Front Royal, Warren County, the Economic Development Authority or a comparable government authority (the localities) seeks to purchase the Site from the bankruptcy Trustee pursuant to terms acceptable to FMC and EPA, for industrial, commercial or recreational development, or for conservation use, EPA will use its best



efforts to negotiate with the localities a Prospective Purchaser Agreement which terms shall include the placement of land use restrictions on the purchased property, restricting the future use of the property east of the Norfolk Southern railroad to commercial, industrial or recreational use, and restricting the future use of the property west of the Norfolk Southern railroad to recreational or conservation use (as set forth in Appendix B), prohibiting groundwater use for the entire Site and prohibiting use of the property in any manner that would interfere with or adversely affect the integrity or protectiveness of the response actions to be implemented pursuant to this Consent Decree. Any such agreement must conform to EPA's Prospective Purchaser Agreement guidance as set forth in the July 3, 1995 Federal Register (60 Fed.Reg. 34,792), and any modifications thereto or other relevant guidance documents concerning Prospective Purchaser Agreements.

18.B. FMC agrees to spend not less than \$1,000,000 to assist the localities in obtaining grant funds, for the purpose of demolition and removing lead paint and asbestos-containing material, and in removing existing buildings, other structures and debris at the Site not subject to the removal response actions required by Paragraphs 21 and 21.A of this Consent Decree. FMC agrees to provide such assistance in order to facilitate redevelopment provided that the localities obtain at least \$11 million in grant funds for such actions. In consideration of FMC's agreement to provide such assistance to the localities, its agreement to conduct and pay for the response actions required pursuant to this Consent Decree and its agreement to reimburse response costs of the United States as provided in this Consent Decree, and FMC's cooperation with EPA in the Avtex Fibers-Front Royal, Inc. bankruptcy proceeding regarding, among other things, transfer of the Site property to the localities, EPA agrees that FMC will have a superpriority priming lien in

the amount of \$2,000,000 in the pending Avtex Fibers-Front Royal, Inc., Bankruptcy No. 90-20290 (TMD proceeding).

## **VII. PERFORMANCE OF THE WORK BY FMC**

### **19. Selection of Contractors.**

#### **a. Supervising Contractors.**

i. All aspects of the Work to be performed by FMC pursuant to Sections VII (Performance of the Work by FMC), IX (Quality Assurance, Sampling, and Data Analysis), and XVI (Emergency Response) of this Consent Decree shall be under the direction and supervision of the Supervising Contractor, the selection of which shall be subject to disapproval by EPA. Within 10 days after the lodging of this Consent Decree, FMC shall notify EPA in writing of the name and the qualifications of any contractor proposed to be the Supervising Contractor (Initial Notification). In addition, and subject to the terms of Section VI (Implementation of Removal Actions and Remedial Actions), with respect to the Removal Action - Buildings, within 30 days after lodging of this Consent Decree; and, within 30 days after EPA issues a Removal Action Memorandum for the Removal Action - Basins that obligates FMC to perform the Removal Action - Basins under Paragraph 14.a. or FMC gives notice of its election to perform the response action under Paragraph 14.b.i.; and, within 30 days after EPA issues a ROD for OU-7 that obligates FMC to perform the OU-7 remedy under Paragraph 15.a. or FMC gives notice of its election to perform the remedy under Paragraph 15.b.i.; and, within 30 days after EPA issues a ROD for OU-10 that obligates FMC to perform the OU-10 remedy under Paragraph 16.a. or FMC gives notice of its election to perform the remedy under Paragraph 16.b.i., FMC shall notify EPA in writing of the name and the qualifications of any contractor

proposed to be the Supervising Contractor for that specific response action or operable unit. After each of these notifications (Initial Notification, Removal Action - Buildings, Removal Action - Basins, OU-7 and OU-10), EPA will issue a notice of disapproval of the Supervising Contractor or an authorization to proceed. If at any time thereafter, FMC proposes to change a Supervising Contractor, FMC shall give such notice to EPA and must obtain an authorization to proceed from EPA before the new Supervising Contractor performs, directs, or supervises any Work under this Consent Decree.

ii. If EPA disapproves the selection of a proposed Supervising Contractor, EPA will notify FMC in writing. FMC shall submit to EPA a list of at least three contractors, including the qualifications of each contractor, that would be acceptable to it within 30 days of receipt of EPA's disapproval. EPA will provide written notice of the names of any contractor(s) whose selection it disapproves and an authorization to proceed with respect to any of the other contractors. FMC may select any contractor from that list that is not disapproved and shall notify EPA of the name of the contractor selected within 21 days of EPA's authorization to proceed.

iii. If EPA fails to provide written notice of its authorization to proceed or disapproval as provided in this Paragraph and this failure prevents FMC from meeting one or more deadlines in a plan approved by EPA pursuant to this Consent Decree, FMC may seek relief under the provisions of Section XIX (Force Majeure) of this Consent Decree.

b. Other Contractors and Subcontractors.

FMC shall submit to EPA for acceptance the names and qualifications of any additional contractors and subcontractors it proposes to use to satisfy any requirement of this Consent Decree before such contractor or subcontractor performs any Work. If EPA does not respond with a notice accepting or disapproving the proposal for additional contractors and subcontractors within 14 days of receipt by EPA of FMC's selections, the proposal for additional contractors and subcontractors shall be deemed accepted. In the event EPA disapproves any proposed or previously accepted contractor or subcontractor, FMC shall submit to EPA a list of at least three contractors or subcontractors, including the qualifications of each, that would be acceptable to it within 14 days of receipt of EPA's disapproval. EPA will provide written notice of the names of any contractor(s) or subcontractor(s) whose selection it disapproves and an authorization to proceed with respect to any of the other contractors or subcontractors. FMC may select any contractor or subcontractor from that list that is not disapproved and shall notify EPA of the name of the contractor or subcontractor selected within 14 days of EPA's authorization to proceed.

20. Site Security and Site Management.

a. On or before lodging of this Consent Decree, FMC shall submit to EPA a Site Security and Site Management Plan to control site access and monitor/coordinate site activities.

At a minimum, the plan shall include:

- i. Provisions for site security 24 hours per day, 365 days per year through the use of qualified security guards;

ii. A description of the roles and responsibilities of the site security team which at a minimum includes: monitoring all site access, screening all site personnel and visitors entering and exiting the site, maintaining a daily entry log and patrolling the site on a routine basis;

iii. Provisions for site management a minimum of five days per week, 52 weeks per year by a qualified on-site manager;

iv. Designation of an on-site manager and the on-site manager's qualifications; and

v. A description of the roles and responsibilities of the on-site manager, which at a minimum includes: managing the security guards, coordinating daily health and safety meetings, being knowledgeable of all on-going site activities, facilitating communications among all parties working on-site, (i.e., FMC, EPA, and contractors), on-going inspections of the site to ensure conditions remain stable and coordinating an initial response in the event of a site emergency such as a flood or fire.

b. EPA will review the Site Security and Site Management Plan and notify FMC of EPA's approval or disapproval. In the event of disapproval, EPA will specify the deficiencies in writing. FMC shall respond to and correct the deficiencies identified by EPA and resubmit the plan to EPA within seven days of receipt of EPA's disapproval or such longer time as may be specified by EPA in its discretion. Exercise of EPA's discretion with respect to such period shall not be subject to the dispute resolution procedures set forth in Section XX of this Consent Decree (Dispute Resolution). Approval, disapproval and/or modification by EPA of any subsequent Site

Security and Site Management Plan submission shall be according to the provisions of Section XII of this Consent Decree (EPA Approval of Other Plans and Submissions).

c. Within 30 days of receipt of written approval to proceed with implementation of the Site Security and Site Management Plan or such longer time as may be specified by EPA in its discretion, FMC shall commence implementation of the EPA-approved Site Security and Site Management Plan.

d. The requirement to pay for and conduct site security and site management pursuant to this Paragraph shall be modified or terminated upon receipt of written notification by EPA to FMC that construction of the Removal Action - Buildings, the Removal Action - Basins, the OU-7 Remedial Action and the OU-10 Remedial Action is complete.

**21. Removal Action - Buildings (Time -Critical)**

FMC shall conduct and complete performance of EPA's selected alternative for the Removal Action-Buildings (Time-Critical) as follows:

a. Within 30 days after lodging of this Consent Decree, FMC shall submit to EPA for approval a Response Action Plan (RAP) for the time-critical actions of the Removal Action - Buildings. The RAP shall provide a plan for the implementation of the removal response action set forth in the Removal Action Memorandum dated March 17, 1995, as modified by the Removal Action Memorandum dated September 29, 1997, and as those memoranda were further modified by Polreps Nos. 817, 865, and 888, and to achieve and maintain the Performance Standards-Removal set forth in those Removal Action Memoranda, as modified, for the Removal Action-Buildings. As set forth in subparagraphs b through l below, the RAP shall contain:

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b. A plan for the disposition of demolition debris (not including clean metal scrap) and sludges present on-site and any other debris and sludge generated during this removal action. The demolition debris currently present on-Site consists of the following piles: W-7 Scrap Debris Pile, W-6 Asbestos Pile, W-5 Cooling Tower Debris Pile, W-4 Rebar/Concrete Debris Pile, W-3 Dirt/Concrete Debris Pile, W-2 Dirt/Concrete Debris Pile, W-1 RCRA Pile, W-1R RCRA Pile, SIV-2 Dirt/Concrete Debris Pile, SVI-2 Dirt/Brick Debris Pile, SVI-1 Dirt/Brick Debris Pile, B-1 Tank/Scrap Debris Pile, B-2 Tanks/Metal Debris Pile, B-3 Metal/Dirt Debris Pile, B-4 Metal/Dirt Debris Pile, B-5 Pipes Pile, SVI-3 Crumb/Caustic Soda Pile, SVI-4 RCRA Pile, E-1 RCRA Pile, E-2 Metal Debris Pile, E-3 Viscose Pile, CM-1 Dirt/Debris Pile from Churn & Mix, CM-2 Metal Debris Pile from Churn & Mix, SVII-1 Sludge Piles in Coal Yard, 6A Viscose Debris Pile, and ERM-1 Dirt/Sludge Pile from #2 Mercerizing and including materials from these piles that have spread onto the staging areas. Sludges to be addressed include sludges in the Cooling Tower Decontamination Pit, the Soft Water Pump House Tanks, the large vaults attached to the Cooling Tower Pit, a two million gallon #6 PCB Oil Tank (sludge should be removed and tank cleaned), the 6A Viscose Sludge Cell and the PCB Sludge Cell. At a minimum, the plan for the disposition of demolition debris and sludges shall:

- i. Identify and discuss the Applicable or Relevant and Appropriate Requirements (ARARs) governing decontamination, on-site reuse of debris and transportation and disposal/recycling of debris and sludges and how the action will meet the ARARs;
- ii. Identify an appropriate process to screen debris piles to remove inert debris or debris which can be made inert and is suitable for backfill or other EPA-approved uses at the Site;

iii. Identify a procedure for inspecting the components of the debris piles during the screening process to identify high hazard components (e.g., asbestos, PCB capacitors, etc.) and a plan to remove high hazard items from the waste stream or otherwise stabilize these hazards;

iv. Identify a process for sampling debris and screened particulates appropriate for disposal or reuse;

v. Identify an appropriate treatment process(es) for decontaminating or deactivating waste materials, as needed, consistent with ARARs for on-site disposal or reuse; and

vi. Provide for on-site and off-site transportation and disposal of all debris and sludges generated during the removal response action in accordance with Paragraph 21.q.

c. A plan for the removal of solids and liquids containing hazardous substances or contaminants from within Churn & Mix #2 Basement and the gutter and hydraulic sump adjacent to the Mercerizing #2 Basement Area (Pressing Basement) and removal of the sewer line, including materials contained therein, connecting Churn & Mix #2 to the 6A Viscose Cellar. At a minimum, the plan shall:

i. Identify and discuss the ARARs governing this portion of the removal action and how the action will meet the ARARs;

ii. Identify an appropriate process for removing the sewer line;

iii. Identify procedures for removing and managing contaminated materials and solid/liquid residues present in these areas so that they no longer release hazardous substances;



iv. Provide for on-site and off-site transportation and disposal of all debris and sludges generated during the action in accordance with Paragraph 21.q;

v. Identify soil cleanup levels for EPA approval sufficient to protect commercial, industrial or construction workers under a direct contact exposure scenario. Final site-wide soil cleanup standards will be developed by EPA for inclusion in a future ROD. Additional remedial response for soils in this area may be required pursuant to such future ROD;

vi. Identify procedures for conducting post removal sampling to ensure that contaminant levels are at or below the EPA-approved cleanup levels; and

vii. Identify procedures for backfilling and general regrading of the affected areas.

d. A plan to evaluate, decommission and dispose of or recycle the carbon disulfide storage tank recovery system. The system consists of two carbon disulfide above ground storage tanks (ASTs), and one carbon disulfide underground storage tank (UST) containing contaminated liquid and a sludge layer. At a minimum, the plan shall include:

i. An identification and discussion of the ARARs governing decommissioning and disposing of or recycling the tanks, debris, liquids, sludges and soils and a discussion of how the action will meet the ARARs;

ii. Procedures for managing any solid/liquid residues and wastes;

iii. Procedures for decontaminating the tanks as necessary;

iv. Procedures for treating (as needed), transporting and disposing of or recycling tanks and liquid and solid wastes;

v. Procedures for determining the nature and extent of soil contamination from the carbon disulfide UST;

vi. Identification of proposed soil clean-up levels for EPA selection, by a duly delegated EPA official, sufficient to protect commercial, industrial or construction workers under a direct contact exposure scenario. Final site-wide soil cleanup standards will be developed by EPA for inclusion in a future ROD. Additional remedial response for soils in this area may be required pursuant to such future ROD;

vii. Procedures for proper excavation and/or treatment of all contaminated soil associated with the carbon disulfide UST in excess of the EPA-approved clean-up level(s);

viii. Provisions for off-site disposal, including any necessary treatment, of all excavated soil associated with the carbon disulfide UST in excess of the EPA-approved cleanup level(s) or shipment to a RCRA-approved disposal facility in accordance with Paragraph 21.q., or a plan providing for treatment of all soil associated with the carbon disulfide UST contaminated with hazardous substances in excess of the EPA-approved cleanup level(s);

ix. Procedures for conducting post excavation and/or treatment sampling of soil associated with the carbon disulfide UST to ensure that soil contaminant levels are below the EPA-approved cleanup levels after completion of the work; and

x. Procedures and plans for backfilling the area.

e. A plan for the disposition of accumulated and generated wastes present on-site. Accumulated waste includes asbestos waste located in West Staging and in bags and cubic yard boxes in Shipping #2 and Shipping #4, and containerized wastes in cubic yard boxes, drums,

bottles, bags located in Shipping #2, Pulp Storage #1, Shipping #4, Chemical House and Shipping #5, used containers in Pulp Storage #2, TSCA-contaminated material located in the Creel Room and the PCB-transformer located at the Wastewater Treatment Plant. Generated wastes consist of wastes generated as a result of the performance of the time-critical items of the Removal Action - Buildings. At a minimum, the plan shall include:

- i. Procedures for sampling and analysis of such wastes;
- ii. A waste consolidation strategy; and
- iii. Provisions for transportation and off-site waste disposal in

accordance with Paragraph 21.q.

f. A plan and schedules to accomplish the work of stabilizing, controlling and monitoring the migration of hazardous substances which includes at a minimum:

i. Procedures to minimize the migration of hazardous substances through the sewer system by installing and maintaining barriers to prevent infiltration of potentially contaminated surface water into manholes at the locations where hazardous substances are staged or known to be located;

ii. A strategy to evaluate drainage pathways near waste areas and areas of concentrated hazardous substances (hot spots) and procedures to prevent migration of such hazardous substances;

iii. A strategy and procedures for sampling, monitoring and minimizing fugitive air emissions including dust from the Site. The control of fugitive emissions from the Site during FMC's operations at the Site shall be in accordance with state and federal ambient air quality criteria; and

iv. A strategy and procedures to inspect, control and respond to spills and releases including:

a) Implementing, as necessary, and maintaining erosion and sediment control measures, so that contaminated water and leachate is collected and not released in an uncontrolled manner. Such measures may include, but not be limited to, the use of trenches sumps, revegetation and the covering and maintaining of soil and debris piles;

b) Conducting visual inspections of sewers, trenches, and sumps to assess water levels and conditions on a weekly basis and after precipitation events;

c) Characterizing, removing, treating and/or disposing of contaminated liquids in any sewers, building basements, trenches and/or sumps that fill with contaminated liquids in accordance with promulgated requirements and standards; and

d) Conducting visual inspections of all waste storage areas to ensure that hazardous substances are not being released to the environment and procedures to address releases expeditiously on a weekly basis and after precipitation events.

g. Provisions for the transportation of all hazardous substances designated for off-site disposal to an EPA-accepted disposal facility in accordance with the U.S. Department of Transportation requirements, and to assure their proper disposal in accordance with Paragraph 21.q and other applicable laws and regulations.

h. A plan for the discharge of waste water generated from decontamination processes or accumulated in storage areas, trenches and sumps to the on-site waste water treatment system that shall be in conformity with the waste water treatment provisions in Section VI (Implementation of Removal Actions and Remedial Actions), Paragraph 11.

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i. A plan to maintain the accessibility of roadways throughout the Site, including, but not limited to, roadways to waste storage areas, erosion control measures, and command structures. The plan should include, but not be limited to, snow removal.

j. A plan to provide Site specific health and safety measures, including preparation and implementation of a Health and Safety Plan (HASP) for actions to be performed at the Site, to protect the health and safety of workers, other personnel and the public from the hazardous substances and work-related health and safety hazards during performance of the time-critical items of the Removal Action - Buildings. The HASP shall, as appropriate, provide for proper decontamination of personnel and equipment, monitoring and control of offsite migration of hazardous substances during the performance of activities at the Site and protection of public health from exposure to hazardous substances during the conducting of activities at the Site pursuant to this Consent Decree. Health and safety requirements in the HASP shall be at least as stringent as those set forth in Occupational Safety and Health Administration and EPA requirements, including but not limited to requirements contained in 29 C.F.R. § 1910.120 and/or EPA Standard Operating Safety Guides (July 5, 1988).

k. Identification of the Hazardous Waste Generator Identification Number.

l. A schedule for expeditious implementation of the RAP.

~~m.~~ To the extent that information concerning the details of a particular item does not yet exist so that it can be described in the RAP, the RAP shall set forth an expeditious schedule and plan for submittal of RAP supplement(s) to EPA for approval, which supplement(s) shall fully detail such items. All references to the review, approval and enforcement of the RAP shall also be applicable to any RAP supplement(s). The RAP shall be consistent with the NCP

and shall be subject to approval by EPA according to the provisions of Section XII (EPA Approval of Plans and Other Submissions).

n. Within seven days of receipt from EPA of written approval to proceed with implementation of the EPA-approved RAP, FMC shall commence implementation of such RAP and complete it in accordance with the RAP and the schedule therein. In the event EPA determines that any portion of the response action performed is deficient, and EPA requires FMC to correct or re-perform such portion of the response action pursuant to this Consent Decree, FMC shall correct or re-perform such response action or portion of the response action in accordance with a schedule provided by EPA.

o. Beginning the first Monday following the date of receipt of EPA approval of the RAP and continuing until construction of the Removal Action - Buildings is complete pursuant to Paragraph 65.a. of Section XV (Certification of Completion), FMC shall provide EPA with progress reports for each preceding seven-day period or such longer period as may be specified in writing by the EPA Project Coordinator, which reports shall be in accordance with the provisions of Paragraph 45.A. of Section XI (Reporting Requirements).

p. Within 20 days of the date FMC concludes it has completed implementation of the RAP for the items identified in Paragraphs 21.a. - 21.l., FMC shall submit a written Final Report to EPA, which shall be in accordance with the provisions of Paragraph 45.B. of Section XI (Reporting Requirements).

q. FMC shall not handle or remove any hazardous substances from the Site except in conformance with the terms of this Consent Decree and all applicable Federal, State and local laws, ordinances and regulations. Any hazardous substance, pollutant or contaminant

transferred for disposal off-site as a result of this Consent Decree must be taken to a facility in accordance with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and with 40 C.F.R. § 300.440, and amendments thereto.

r. FMC shall not commence any work except in conformance with the terms of this Consent Decree. FMC shall not commence implementation of the RAP developed hereunder until receiving written EPA approval of the RAP under Section XII (EPA Approval of Plans and Other Submissions).

s. In the event that EPA believes that response actions or other activities at the Site conducted by FMC pursuant to the terms of this Consent Decree are causing or may cause a release or potential release of hazardous substances, or are a threat to public health or welfare or to the environment, EPA may, in its discretion, immediately halt or modify such response actions or other activities to eliminate or mitigate such actual or potential releases or threats.

**21.A. Removal Action - Buildings (Non-Time Critical).**

FMC shall accomplish the following non-time critical items:

a. Within 90 days after lodging of this Consent Decree, FMC shall submit to EPA for approval a work plan for the conduct of an EE/CA that is consistent with CERCLA, the NCP, and EPA guidance including, without limitation, EPA's Guidance on Conducting Non-Time Critical Removal Actions Under CERCLA, OSWER Directive No. 9360.0-32 (August 1993). The work plan for the EE/CA shall address the decontamination of the remaining buildings and structures at the Site, the disposal or recycling of clean metal scrap from building demolition, the evaluation of response action alternatives for the migration of hazardous

substances related to foundations and subgrade structures and the evaluation of response action alternatives for the sewers.

b. Following EPA approval, FMC shall implement the EE/CA work plan described in Paragraph 21.A.a. above.

c. Within 90 days after EPA approval of the EE/CA work plan, FMC shall submit to EPA for approval an EE/CA. FMC shall consider the findings obtained from implementation of the EE/CA work plan to propose removal cleanup levels and actions or treatment or removal alternatives to perform the non-time critical actions of the Removal Action-Buildings. The EE/CA shall be prepared in accordance with the guidance identified in Paragraph 21.A.a. and shall be subject to approval by EPA according to the provisions of Section XII (EPA Approval of Plans and Other Submissions). The EE/CA shall include the following:

i. A buildings, structures, foundations, subgrade structures and sewers characterization which includes, among other things, an evaluation of the nature and extent of the threat to the public health and welfare and the environment caused by the release or threatened release of hazardous substances, pollutants, or contaminants at and from the remaining buildings and structures at the Site, at or from the remaining parts of the foundations and substructures, and at or from the sewers;

ii. A comparative evaluation of response action alternatives to prevent, mitigate or eliminate unacceptable risks to human health and welfare and the environment from the release or threatened release of hazardous substances, pollutants, or contaminants at or from the remaining buildings and structures at the Site, at or from the remaining parts of the foundations and substructures, and at or from the sewers;



iii. A listing and discussion of ARARs for addressing contamination in the remaining buildings, structures, foundations, substructures and sewers at the Site and, if demolition of any of the remaining parts of the foundations, substructures and sewers is appropriate, identification of ARARs governing on-site reuse of debris and other materials. Off-site transportation and disposal/recycling of debris from these structures shall also be discussed; and

iv. A recommended removal action alternative.

d. Upon completion of the EE/CA, EPA will compile the administrative record, which will include, at a minimum, the EE/CA. The administrative record will be made available for public inspection and comment for a minimum of 30 days, pursuant to 40 C.F.R. §§ 300.415 and 300.820. Following the public review and comment period, EPA shall issue a Removal Action Memorandum and EPA will notify FMC which removal action alternative EPA has selected.

e. FMC shall conduct and complete the removal action alternative selected by EPA, as follows. Within 30 days of EPA's issuance of the Removal Action Memorandum required by this Paragraph, FMC shall submit to EPA for approval a RAP to perform the removal action alternative selected by EPA. However, the obligation of FMC to include in the RAP the performance of the removal action alternative selected by EPA for the sewers shall be subject to the following additional provisions. If FMC is obligated pursuant to Paragraph 13.b. of this Consent Decree to perform the response action alternative for the sewers selected by EPA in the Removal Action Memorandum for the Removal Action - Buildings, the response action alternative selected by EPA for the sewers shall be included in the RAP to be submitted by FMC

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within 30 days after EPA's issuance of the Removal Action Memorandum for the Removal Action - Buildings. If the condition in Paragraph 13.b.i or 13.b.ii. exists, and FMC elects to perform the response action alternative for the sewers selected by EPA pursuant to Paragraph 13.c.i., within 90 days after EPA's issuance of the Removal Action Memorandum for the Removal Action - Buildings, FMC shall submit to EPA for approval a supplement to the previously submitted RAP to perform the response action alternative for the sewers selected by EPA. If FMC invokes dispute resolution pursuant to Paragraph 81 with respect to the response action alternative for the sewers selected in the Removal Action Memorandum for the Removal Action - Buildings and if after final resolution of the dispute pursuant to the procedures set forth in Section XX (Dispute Resolution) FMC is obligated to perform the response action alternative for the sewers selected by EPA in the Removal Action Memorandum for the Removal Action - Buildings, within 30 days of such final resolution, FMC shall submit to EPA for approval a supplement to the previously submitted RAP to perform the response action alternative for the sewers selected by EPA. The RAP shall prioritize work to ensure that the most critical areas are addressed first. To the extent that information concerning the details of a particular item does not yet exist so that it can be described in the RAP, the RAP shall set forth an expeditious schedule and plan for submittal of RAP supplement(s) to EPA for approval, which supplement(s) shall fully detail such items. All references to the review, approval and enforcement of the RAP shall also be applicable to any RAP supplement(s). The RAP shall include, among other things, a schedule for expeditious implementation of the RAP and the removal action alternative selected by EPA. The RAP shall be consistent with the NCP and shall be subject to approval by EPA according to the provisions of Section XII (EPA Approval of Plans and Other Submissions).

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f. Within seven days of receipt from EPA of written approval to proceed with implementation of the EPA-approved RAP, FMC shall commence implementation of the selected removal action alternative and shall complete it in accordance with the approved schedule. In the event EPA determines that any portion of the response action performed is deficient, and EPA requires FMC to correct or re-perform such portion of the response action pursuant to this Consent Decree, FMC shall correct or re-perform such response action or portion of the response action in accordance with a schedule provided by EPA.

g. Beginning the first Monday following the date of receipt of EPA approval of the RAP and continuing until construction of the Removal Action - Buildings is complete pursuant to Paragraph 65.a. of Section XV (Certification of Completion), FMC shall provide EPA with progress reports for each preceding seven-day period or such longer period as may be specified in writing by the EPA Project Coordinator, which reports shall be in accordance with the provisions of Paragraph 45.A. of Section XI (Reporting Requirements).

h. Within 20 days of the date FMC concludes it has completed implementation of the RAP for the items identified in Paragraph 21.A.a. - 21.A.e., FMC shall submit a written Final Report to EPA, which shall be in accordance with the provisions of Paragraph 45.B. of Section XI (Reporting Requirements).

i. FMC shall provide for post-removal site control activities for the Removal Action - Buildings consistent with Section 300.415(l) of the NCP, 40 C.F.R. § 300.415(l), and EPA's Policy on Management of Post Removal Site Control, OSWER Directive No. 9360.2-02 (December 3, 1989). Such activities shall include, but not be limited to, arrangements with State or local governments for performance of actions that will ensure the integrity of the work

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performed at the buildings pursuant to this Consent Decree through operation and maintenance measures that will ensure continuous review of monitoring data, and deed notifications.

j. FMC shall not handle or remove any hazardous substances from the Site except in conformance with the terms of this Consent Decree and all applicable Federal, State and local laws, ordinances and regulations. Any hazardous substance, pollutant or contaminant transferred for disposal off-site as a result of this Consent Decree must be taken to a facility in accordance with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and with 40 C.F.R. § 300.440, and amendments thereto.

k. FMC shall not commence any work except in conformance with the terms of this Consent Decree. FMC shall not commence implementation of the RAP developed hereunder until receiving written EPA approval of the RAP under Section XII (EPA Approval of Plans and Other Submissions).

l. In the event that EPA believes that response actions or other activities at the Site conducted by FMC pursuant to this Consent Decree are causing or may cause a release or potential release of hazardous substances, or are a threat to public health or welfare or to the environment, EPA may, in its discretion, immediately halt or modify such response actions or other activities to eliminate or mitigate such actual or potential releases or threats.

## **22. Removal Action - Basins.**

a. FMC shall conduct and complete the performance of EPA's selected removal alternative for the Sulfate Basins 1-5, Fly Ash Units, WWTP Polishing Basins and the Emergency Lagoon, as follows: Upon lodging of this Consent Decree, FMC shall submit to EPA for approval an EE/CA for Sulfate Basins 1-5, Fly Ash Units, WWTP Polishing Basins and the

Emergency Lagoon that is consistent with CERCLA, the NCP, and EPA guidance including, without limitation, EPA's Guidance on Conducting Non-Time Critical Removal Actions Under CERCLA, OSWER Directive No. 9360.0-32 (August 1993).

b. The EE/CA shall be prepared in accordance with the guidance identified in Paragraph 22.a. and shall be subject to approval by EPA according to the provisions of Section XII (EPA Approval of Plans and Other Submissions). The EE/CA shall include the following:

i. A Site characterization which includes, among other things, an evaluation of the nature and extent of the threat to the public health and welfare and the environment caused by the release or threatened release of hazardous substances, pollutants, or contaminants at and from the above-described basins at the Site;

ii. A comparative evaluation of response action alternatives to prevent, mitigate or eliminate unacceptable risks to human health and welfare and the environment from the release or threatened release of hazardous substances, pollutants, or contaminants at or from the above-described basins at the Site;

iii. A listing and discussion of ARARs for addressing contamination at the above-described basins at the Site; and

iv. A recommended removal action alternative(s) for the closure of the above-described basins.

c. Upon completion of the EE/CA, EPA will compile an administrative record, which will include, at a minimum, the EE/CA. The administrative record will be made available for public inspection and comment for a minimum of 30 days, pursuant to 40 C.F.R. §§ 300.415 and 300.820. Following the public review and comment period, EPA shall issue a Removal

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Action Memorandum and EPA will notify FMC which removal action alternative(s) EPA has selected.

d. If FMC is obligated pursuant to Paragraph 14.a. of this Consent Decree to perform the response action alternative selected by EPA in the Removal Action Memorandum for the Removal Action - Basins, within 30 days after EPA's issuance of the Removal Action Memorandum for the Removal Action - Basins, FMC shall submit to EPA for approval a RAP to perform the response action alternative selected by EPA. If the condition in Paragraph 14.a.i. or 14.a.ii. exists, and FMC elects to perform the response action alternative selected by EPA pursuant to Paragraph 14.b.i., within 90 days after EPA's issuance of the Removal Action Memorandum for the Removal Action - Basins, FMC shall submit to EPA for approval a RAP to perform the response action alternative selected by EPA. If FMC invokes dispute resolution pursuant to Paragraph 81 with respect to the Removal Action Memorandum for the Removal Action - Basins and if after final resolution of the dispute pursuant to the procedures set forth in Section XX (Dispute Resolution) FMC is obligated to perform the response action alternative selected by EPA in the Removal Action Memorandum for the Removal Action - Basins, within 30 days of such final resolution, FMC shall submit to EPA for approval a RAP to perform the response action alternative(s) selected by EPA. To the extent that information concerning the details of a particular item does not yet exist so that it can be described in the RAP, the RAP shall set forth an expeditious schedule and plan for submittal of RAP supplement(s) to EPA for approval, which supplement(s) shall fully detail such items. All references to the review, approval and enforcement of the RAP shall also be applicable to any RAP supplement(s). The RAP shall include, among other things, a schedule for expeditious implementation of the selected

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removal action alternative(s). The RAP shall be consistent with the NCP and shall be subject to approval by EPA according to the provisions of Section XII (EPA Approval of Plans and Other Submissions).

e. Within seven days of receipt from EPA of written approval to proceed with implementation of the EPA-approved RAP, FMC shall commence implementation of the selected removal action alternative and shall complete implementation in accordance with the approved schedule. In the event EPA determines that any portion of the response action performed is deficient, and EPA requires FMC to correct or re-perform such portion of the response action pursuant to this Consent Decree, FMC shall correct or re-perform such response action or portion of the response action in accordance with a schedule provided by EPA.

f. Beginning the first Monday following the date of receipt of EPA approval of the RAP and continuing until construction of the Removal Action - Basins is complete pursuant to Paragraph 65.b of Section XV (Certification of Completion), FMC shall provide EPA with progress reports for each preceding seven-day period or such longer period as may be specified in writing by the EPA Project Coordinator, which reports shall be in accordance with the provisions of Paragraph 45.A. of Section XI (Reporting Requirements).

g. Within 20 days of the date FMC concludes it has completed implementation of the RAP for the items identified in Paragraphs 22.a. - 22.e., FMC shall submit a written Final Report to EPA, which shall be in accordance with the provisions of Paragraph 45.B. of Section XI (Reporting Requirements).

h. FMC shall provide for post-removal site control activities for the Removal Action - Basins consistent with Section 300.415(l) of the NCP, 40 C.F.R. § 300.415(l), and

EPA's Policy on Management of Post Removal Site Control, OSWER Directive No. 9360.2-02 (December 3, 1989). Such activities shall include, but not be limited to, arrangements with State or local governments for performance of actions that will ensure the integrity of the work performed at the basins pursuant to this Consent Decree through operation and maintenance measures that will ensure continuous review of monitoring data, and deed notifications.

i. FMC shall not handle or remove any hazardous substances from the Site except in conformance with the terms of this Consent Decree and all applicable Federal, State and local laws, ordinances and regulations. Any hazardous substance, pollutant or contaminant transferred for disposal off-site as a result of this Consent Decree must be taken to a facility in accordance with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440, and amendments thereto.

j. FMC shall not commence any work except in conformance with the terms of this Consent Decree. FMC shall not commence implementation of the RAP developed under Paragraph 22 until receiving written EPA approval of the RAP under Section XII (EPA Approval of Plans and Other Submissions).

k. In the event that EPA believes that response actions or other activities at the Site conducted by FMC pursuant to this Consent Decree are causing or may cause a release or potential release of hazardous substances, or are a threat to public health or welfare or to the environment, EPA may, in its discretion, immediately halt or modify such response actions or other activities to eliminate or mitigate such actual or potential releases or threats.



**23. Remedial Design/Remedial Action - OU-7.**

**a. If FMC is obligated pursuant to Paragraph 15.a. of this Consent Decree to perform the remedy in the OU-7 ROD, then within 30 days after EPA's issuance of the OU-7 ROD, FMC shall submit to EPA for approval a work plan for the design of the OU-7 Remedial Action at the Site (OU-7 Remedial Design Work Plan or OU-7 RD Work Plan) and a Health and Safety Plan for field design activities. If the condition in Paragraph 15.a.i. or 15.a.ii. exists, and FMC elects to perform the remedy pursuant to Paragraph 15.b.i., then within 90 days after EPA's issuance of the OU-7 ROD, FMC shall submit to EPA for approval an OU-7 Remedial Design Work Plan and a Health and Safety Plan for field design activities. If FMC invokes dispute-resolution pursuant to Paragraph 81 with respect to the OU-7 ROD and if after final resolution of the dispute pursuant to the procedures set forth in Section XX (Dispute Resolution) FMC is obligated to perform the remedy in the OU-7 ROD, within 30 days of such final resolution, FMC shall submit to EPA an OU-7 Remedial Design Work Plan and a Health and Safety Plan for field design activities. The OU-7 Remedial Design Work Plan shall provide for the design of the remedy set forth in the OU-7 ROD and for achievement of the OU-7 Performance Standards-Remedial and other requirements set forth in the OU-7 ROD and this Consent Decree. Upon its approval by EPA, the OU-7 Remedial Design Work Plan shall be incorporated into and become enforceable under this Consent Decree. The Health and Safety Plan for field design activities shall conform to applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120.**

**b. The OU-7 Remedial Design Work Plan shall include plans, schedules, and methodologies for implementation of all necessary remedial pre-design and design tasks**

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(including Preliminary Design, Intermediate Design (if required), and Final Design), and shall include, at a minimum:

- i. an OU-7 Site Management Plan;
- ii. an OU-7 Sampling and Analysis Plan, containing:
  - (a) a Field Sampling Plan; and
  - (b) a Quality Assurance Project Plan (QAPP);
- iii. an OU-7 Treatability Study Work Plan, if required by the OU-7 ROD, which includes, at a minimum, plans and schedules for the preparation and submission of an OU-7 Treatability Study Evaluation Report;
- iv. plans and schedules for the preparation and submission of OU-7 Design Submittals, including the Preliminary Design, Intermediate Design (if required by EPA), and Final Design containing, at a minimum, the following design elements:
  - a) an OU-7 Design Criteria Report, including: 1) project description; 2) design requirements and provisions; 3) process flow diagrams; and 4) Operation & Maintenance requirements;
  - b) an OU-7 Basis of Design Report, including:
    - 1) justification of design assumptions; 2) a project delivery strategy; 3) remedial action permit plan for off-site permits; and 4) easement/access requirements;
  - c) OU-7 Drawings and Specifications, including:
    - 1) general specifications; 2) schematics and drawings; 3) chemical and geotechnical data (including data from pre-design activities); and 4) Remedial Action schedules;

d) an OU-7 Operation & Maintenance Plan, if O & M is required by the OU-7 ROD;

e) an OU-7 Construction Quality Assurance Plan (OU-7 CQAP), which shall detail the approach to quality assurance during construction activities at the Site and shall specify a quality assurance official (QA Official), independent of the Construction Contractor, to conduct a quality assurance program during the construction phase of the OU-7 project;

f) an OU-7 Remedial Action decontamination plan;

g) an OU-7 Remedial Action schedule;

h) an OU-7 Remedial Action Waste Management Plan; and

i) an OU-7 Remedial Action Sampling and Analysis Plan

(directed at measuring progress towards meeting the OU-7 Performance Standards-Remedial);

v. plans and schedules for the preparation and submission of the OU-7 Preliminary Design. The Preliminary Design begins with the initial design and ends with the completion of approximately 30% of the design effort and shall address all of EPA's comments on the Remedial Design Work Plan;

vi. if required by EPA, plans and schedules for the preparation and submission of an OU-7 Intermediate Design submittal. The Intermediate Design shall be submitted at approximately 60% percent of the design effort and shall address all of EPA's comments on the Preliminary Design; and

vii. plans and schedules for the preparation and submission of an OU-7 Final Design submittal which shall be submitted at 100% of the design effort and shall address

all of EPA's comments on the previous design submittal, and, at a minimum, additionally include a Remedial Action Work Plan. The Remedial Action Work Plan is subject to EPA approval and shall be developed in accordance with the OU-7 ROD and shall be consistent with the Final Design. The Remedial Action Work Plan shall include methodologies, plans and schedules for completion of at least:

- a) the selection of the Remedial Action contractors and subcontractors;
- b) implementation of the Remedial Design;
- c) methodology for implementation of the CQAP;
- d) identification of and satisfactory compliance with applicable permitting requirements; and
- e) a final OU-7 Remedial Action Work Plan schedule.

c. Upon approval of the OU-7 Remedial Design Work Plan by EPA, and submittal of the Health and Safety Plan for all field activities to EPA, FMC shall implement the OU-7 Remedial Design Work Plan. FMC shall submit to EPA all plans, submittals and other deliverables required under the approved OU-7 Remedial Design Work Plan in accordance with the approved schedule for review and approval pursuant to Section XII (EPA Approval of Plans and Other Submissions). Unless otherwise directed by EPA, FMC shall not commence further OU-7 Remedial Design field activities at the Site prior to approval of the OU-7 Remedial Design Work Plan.

d. Upon approval, approval with conditions, or modification by EPA, as provided in Section XII (EPA Approval of Plans and Other Submissions), of all components of the OU-7

Final Design submittal, which includes the OU-7 Remedial Action Work Plan, the OU-7 Final Design shall be enforceable under this Consent Decree. FMC shall implement the activities required under the OU-7 Remedial Action Work Plan in accordance with the schedules and methodologies contained therein.

e. FMC shall submit all plans, submittals, or other deliverables required under the OU-7 Remedial Action Work Plan in accordance with the approved schedule for review and approval pursuant to Section XII (EPA Approval of Plans and Other Submissions). Design submittals may be combined or eliminated at the sole discretion of EPA. Unless otherwise directed by EPA or required under the OU-7 Remedial Design Work Plan, FMC shall not commence OU-7 field activities at the Site prior to the date for commencement set forth in the approved schedule in the OU-7 Remedial Action Work Plan.

f. FMC shall continue to implement the OU-7 Remedial Action and O & M (if required by the OU-7 ROD) until the OU-7 Performance Standards-Remedial are achieved and for so long thereafter as is otherwise required under this Consent Decree.

**24. Remedial Design/Remedial Action - OU-10.**

a. If FMC is obligated pursuant to Paragraph 16.a. of this Consent Decree to perform the remedy in the OU-10 ROD, then within 30 days after EPA's issuance of the OU-10 ROD, FMC shall submit to EPA for approval a work plan for the design of the OU-10 Remedial Action at the Site ("OU-10 Remedial Design Work Plan" or "OU-10 RD Work Plan") and a Health and Safety Plan for field design activities. If the condition in Paragraph 16.a.i. or 16.a.ii. exists, and FMC elects to perform the remedy pursuant to Paragraph 16.b.i., then within 90 days after EPA's issuance of the OU-10 ROD, FMC shall submit to EPA for approval an OU-10

Remedial Design Work Plan and a Health and Safety Plan for field design activities. If FMC invokes dispute resolution pursuant to Paragraph 81 with respect to the OU-10 ROD and if after final resolution of the dispute pursuant to the procedures set forth in Section XX (Dispute Resolution) FMC is obligated to perform the remedy in the OU-10 ROD, within 30 days of such final resolution, FMC shall submit to EPA an OU-10 Remedial Design Work Plan and a Health and Safety Plan for field design activities. The OU-10 Remedial Design Work Plan shall provide for the design of the remedy set forth in the OU-10 ROD and for achievement of the OU-10 Performance Standards-Remedial and other requirements set forth in the OU-10 ROD and this Consent Decree. Upon its approval by EPA, the OU-10 Remedial Design Work Plan shall be incorporated into and become enforceable under this Consent Decree. The Health and Safety Plan for field design activities shall conform to applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. § 1910.120.

b. The OU-10 Remedial Design Work Plan shall include plans, schedules, and methodologies for implementation of all necessary remedial pre-design and design tasks (including Preliminary Design, Intermediate Design (if required), and Final Design), and shall include, at a minimum:

i. an OU-10 Site Management Plan;

ii. an OU-10 Sampling and Analysis Plan, containing:

(a) a Field Sampling Plan; and

(b) a Quality Assurance Project Plan (QAPP);

iii. an OU-10 Treatability Study Work Plan, if required by the OU-10 ROD, which includes, at a minimum, plans and schedules for the preparation and submission of an OU-10 Treatability Study Evaluation Report;

iv. plans and schedules for the preparation and submission of OU-10 Design Submittals, including the Preliminary Design, Intermediate Design (if required by EPA), and Final Design containing, at a minimum, the following design elements:

a) an OU-10 Design Criteria Report, including: 1) project description; 2) design requirements and provisions; 3) process flow diagrams; and 4) Operation & Maintenance requirements;

b) an OU-10 Basis of Design Report, including:  
1) justification of design assumptions; 2) a project delivery strategy; 3) remedial action permit plan for off-site permits; and 4) easement/access requirements;

c) OU-10 Drawings and Specifications, including:  
1) general specifications; 2) schematics and drawings; 3) chemical and geotechnical data (including data from pre-design activities); and 4) Remedial Action schedule;

d) an OU-10 Operation & Maintenance Plan, if O & M is required by the OU-10 ROD;

e) an OU-10 Construction Quality Assurance Plan (OU-10 CQAP), which shall detail the approach to quality assurance during construction activities at the Site and shall specify a quality assurance official (QA Official), independent of the Construction Contractor, to conduct a quality assurance program during the construction phase of the OU-10 project;

- f) an OU-10 Remedial Action decontamination plan;
- g) an OU-10 Remedial Action schedule;
- h) an OU-10 Remedial Action Waste Management Plan; and
- i) an OU-10 Remedial Action Sampling and Analysis Plan

(directed at measuring progress towards meeting the OU-10 Performance Standards-Remedial);

v. plans and schedules for the preparation and submission of the OU-10 Preliminary Design. The Preliminary Design begins with the initial design and ends with the completion of approximately 30% of the design effort and shall address all of EPA's comments on the Remedial Design Work Plan;

vi. if required by EPA, plans and schedules for the preparation and submission of an OU-10 Intermediate Design submittal. The Intermediate Design shall be submitted at approximately 60% percent of the design effort and shall address all of EPA's comments on the Preliminary Design; and

vii. plans and schedules for the preparation and submission of an OU-10 Final Design submittal which shall be submitted at 100% of the design effort and shall address all of EPA's comments on the previous design submittal, and, at a minimum, additionally include a Remedial Action Work Plan. The Remedial Action Work Plan is subject to EPA approval and shall be developed in accordance with the OU-10 ROD and shall be consistent with the Final Design. The Remedial Action Work Plan shall include methodologies, plans and schedules for completion of at least:

- a) the selection of the Remedial Action contractors and subcontractors;



- b) implementation of the Remedial Design;
- c) methodology for implementation of the CQAP;
- d) identification of and satisfactory compliance with applicable permitting requirements; and
- e) a final OU-10 Remedial Action Work Plan schedule.

c. Upon approval of the OU-10 Remedial Design Work Plan by EPA, and submittal of the Health and Safety Plan for all field activities to EPA, FMC shall implement the OU-10 Remedial Design Work Plan. FMC shall submit to EPA all plans, submittals and other deliverables required under the approved OU-10 Remedial Design Work Plan in accordance with the approved schedule for review and approval pursuant to Section XII (EPA Approval of Plans and Other Submissions). Unless otherwise directed by EPA, FMC shall not commence further OU-10 Remedial Design field activities at the Site prior to approval of the OU-10 Remedial Design Work Plan.

d. Upon approval, approval with conditions, or modification by EPA, as provided in Section XII (EPA Approval of Plans and Other Submissions), of all components of the OU-10 Final Design submittal, which includes the OU-10 Remedial Action Work Plan, the OU-10 Final Design shall be enforceable under this Consent Decree. FMC shall implement the activities required under the OU-10 Remedial Action Work Plan in accordance with the schedules and methodologies contained therein.

e. FMC shall submit all plans, submittals, or other deliverables required under the OU-10 Remedial Action Work Plan in accordance with the approved schedule for review and approval pursuant to Section XII (EPA Approval of Plans and Other Submissions). Design

submittals may be combined or eliminated at the sole discretion of EPA. Unless otherwise directed by EPA or required under the OU-10 Remedial Design Work Plan, FMC shall not commence OU-10 field activities at the Site prior to the date for commencement set forth in the approved schedule in the OU-10 Remedial Action Work Plan.

f. FMC shall continue to implement the OU-10 Remedial Action and O & M (if required by the OU-10 ROD) until the OU-10 Performance Standards-Remedial are achieved and for so long thereafter as is otherwise required under this Consent Decree.

**25.A. Resident Engineer.**

Following EPA approval, approval with conditions, or modifications by EPA, as provided in Section XII (EPA Approval of Plans and Other Submissions), of all components of the RAPs for the removal response actions and all components of the final design submittals for the RODs, and prior to commencement of any on-Site work under the EPA-approved RAPs and the Remedial Action Work Plans for the RODs, FMC shall submit to EPA the name and qualifications of a Resident Engineer who will be present periodically at the Site during construction to ensure that the Work is performed in accordance with the approved RAPs and the approved Remedial Action Work Plans. The Resident Engineer shall be familiar with all aspects of the approved RAPs and the approved Remedial Designs. EPA retains the right to disapprove the use of any Resident Engineer proposed by FMC. In the event EPA disapproves the use of any proposed Resident Engineer, FMC shall submit to EPA a list of at least three replacements, including the qualifications of each, who would be acceptable to FMC, within seven days of receipt of EPA's notice. EPA will provide written notice of the names of any replacements whose use it would accept. FMC may select any replacement from the EPA notice and shall

notify EPA of the name of the replacement selected within three days of receipt of EPA's written notice. FMC shall ensure that the Resident Engineer performs on-Site inspections as necessary to ensure compliance with the approved RAPs and the approved Remedial Action Work Plans and that the results of such inspections are promptly provided to FMC and EPA. The Resident Engineer may act as the quality assurance official.

**25. B. Technical Impracticability.**

a. With respect to attainment of Performance Standards-Remedial for OU-7 and OU-10 that will be contained in ROD 4 and ROD 5, FMC may petition EPA to modify one or more of the Performance Standards-Remedial on the ground that it is technically impracticable from an engineering perspective, within the meaning of Section 121(d)(4)(C) of CERCLA, 42 U.S.C. § 9621(d)(4)(C), and any amendments thereto, to attain such Performance Standards-Remedial.

b. If, after receipt of a petition to modify a Performance Standard-Remedial pursuant to this Paragraph, EPA determines that compliance with such pre-petition Performance Standard-Remedial is technically practicable from an engineering perspective, EPA will so notify FMC. FMC shall continue to implement the Work to achieve the pre-petition Performance Standard-Remedial. FMC may dispute EPA's determination that compliance with the pre-petition Performance Standard-Remedial is technically practicable from an engineering perspective solely on the ground that, based on the administrative record, EPA's determination was arbitrary and capricious or otherwise not in accordance with the law. Any such dispute shall be governed by Paragraph 84 of Section XX (Dispute Resolution) of this Consent Decree. In no event shall a Performance Standard-Remedial be selected by the Court. If the Court determines,

based upon review of the administrative record, that EPA's determination that compliance with the pre-petition Performance Standard-Remedial is technically practicable from an engineering perspective was arbitrary and capricious or otherwise not in accordance with the law, the Court will remand such issue to EPA for reconsideration.

c. If, after receipt of a petition to modify a Performance Standard-Remedial pursuant to this Paragraph, EPA determines that compliance with such pre-petition Performance Standard-Remedial is technically impracticable from an engineering perspective, EPA may modify such Performance Standard-Remedial in accordance with the procedures set forth in CERCLA and the NCP. If EPA modifies a Performance Standard-Remedial, FMC shall perform the Work to achieve the modified Performance Standard-Remedial. FMC may dispute the modified Performance Standard-Remedial solely on the ground that, based on the administrative record, EPA's selection of such modified Performance Standard-Remedial was arbitrary and capricious or otherwise not in accordance with the law. Any such dispute shall be governed by Paragraph 84 of Section XX (Dispute Resolution) of this Consent Decree. In no event shall a Performance Standard-Remedial be selected by the Court. If the Court determines, based upon review of the administrative record, that EPA's selection of a modified Performance Standard-Remedial was arbitrary and capricious or otherwise not in accordance with the law, the Court will remand such issue to EPA for reconsideration.

d. Neither the submission of a petition to modify one or more Performance Standards-Remedial nor consideration of such petition by EPA shall alter or otherwise affect any obligation or requirement of this Consent Decree including, but not limited to, implementation of EPA-approved work plans. FMC is obligated to attain all pre-petition Performance Standards-

Remedial, including those Performance Standards-Remedial that are the subject of any modification petition, until such pre-petition Performance Standards-Remedial are modified.

e. Any petition submitted pursuant to this Paragraph shall include, at a minimum, the information and analyses required by EPA guidance and shall be based on site-specific data and conditions.

f. The invocation of formal dispute resolution procedures in regard to this Paragraph 25.B. will not extend, postpone, or affect in any way any obligation of FMC under this Consent Decree. Stipulated penalties with respect to the matter in dispute shall continue to accrue but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Consent Decree. In the event that FMC does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XXI (Stipulated Penalties). In the event that FMC prevails on the disputed issue, no stipulated penalties shall be owed for the particular violation that was the subject of the dispute.

26. Construction Quality Assurance. The Construction Quality Assurance Plan (CQAP), which shall detail the approach to quality assurance during construction activities at the Site, shall specify a quality assurance official (QA Official) to conduct a quality assurance program during the construction of the OU-7 and OU-10 remedies. Prior to commencement of any Site Work under the OU-7 and OU-10 Remedial Action Work Plans, and in accordance with Section VII (Performance of the Work by FMC), FMC shall notify EPA of the name and qualifications of the QA Official to be present at the Site during the construction to ensure that

the Work is performed in accordance with the Remedial Action Work Plans for these operable units. The QA Official shall be independent of the Construction Contractor.

**27. Modification of the Work.**

a. If EPA determines that modification of the Work under this Consent Decree is necessary to achieve and maintain the Performance Standards-Removal of a selected removal response action or is necessary to achieve and maintain the Performance Standards-Remedial selected in a ROD, EPA may (1) require that such modification be incorporated into the Response Action Plans, Remedial Design Work Plans, Remedial Action Work Plans, Operation and Maintenance Plans, and/or any other plans relating to such Work for that response action, and/or (2) require that FMC submit a plan for EPA approval which incorporates such modification to the Work and implement such approved plan for that response action. A modification may be required pursuant to this Paragraph only to the extent that it is consistent with the scope of the removal action selected in the Removal Action Memorandum for each respective Removal Action or the scope of the remedy selected in a ROD for each respective OU.

b. For the purposes of this Paragraph only, the "scope of the removal action selected in the Removal Action Memorandum" for the time-critical items of the Removal Action - Buildings means: (1) tasks employing a technology or combination of technologies, cleanup actions, post removal site control and institutional controls which can achieve and maintain the Performance Standards-Removal of the selected removal response action in the Removal Action Memorandum for the buildings dated March 17, 1995, as modified by the Removal Action Memorandum dated September 29, 1997, as those memoranda were further modified by Polreps Nos. 817, 865, and 888, consistent with Paragraph 21 of this Consent Decree, and consistent with

CERCLA and the NCP. For the purposes of Section XV (Certification of Completion), Paragraphs ~~65.a.~~ and 65.e. only, the "scope of the removal action selected in the Removal Action Memorandum" for the time-critical items of the Removal Action - Buildings shall be the removal action selected in the Removal Action Memorandum for the buildings dated March 17, 1995, as modified by the Removal Action Memorandum dated September 29, 1997, as those memoranda were further modified by Polreps Nos. 817, 865, and 888, consistent with Paragraph 21 of this Consent Decree, CERCLA and the NCP, as modified by any modifications made pursuant to this Consent Decree. For the purposes of this paragraph only, the "scope of the removal action selected in the Removal Action Memorandum" for the non-time critical items of the Removal Action-Buildings means: (1) tasks employing a technology or combination of technologies, cleanup actions, post removal site control and institutional controls which can achieve and maintain the Performance Standards-Removal of the selected removal response action described in the Removal Action Memorandum which is identified in Paragraph 21.A.d. of this Consent Decree. For the purposes of Section XV (Certification of Completion), Paragraphs 65.a. and 65.e. only, the "scope of the removal action selected in the Removal Action Memorandum" for the non-time critical items of the Removal Action - Buildings shall be the removal action selected in the Removal Action Memorandum which is identified in Paragraph 21.A.d. of this Consent Decree as modified by any modifications made pursuant to this Consent Decree. For purposes of this Paragraph only, the "scope of the removal action selected in the Removal Action Memorandum" for the Removal Action-Basins means: (1) tasks employing a technology or combination of technologies, cleanup actions, post removal site control and institutional controls which can achieve and maintain the Performance Standards-Removal of the selected removal

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response action described in the Removal Action Memorandum which is identified in Paragraph 22.c. of this Consent Decree. For the purposes of Section XV (Certification of Completion), Paragraphs 65.b. and 65.e. only, the "scope of the removal action selected in the Removal Action Memorandum" for the Removal Action-Basins shall be the removal action selected in the Removal Action Memorandum which is identified in Paragraph 22.c. of this Consent Decree as modified by any modification made pursuant to this Consent Decree. For the purposes of this Paragraph only, the "scope of the remedy selected in a ROD" means: (1) tasks employing a technology or combination of technologies to achieve and maintain the Performance Standards-Remedial of the selected remedial action described in the original ROD for each respective OU; and (2) tasks associated with monitoring of Site conditions and the effectiveness of a selected remedial action and the implementation of institutional controls. For the purposes of Section XV (Certification of Completion), Paragraphs 65.c., 65.d., and 65.e. only, the "scope of the remedy selected in a ROD" shall be the remedial alternative selected in the original ROD(s), as modified by any modifications made pursuant to this Consent Decree.

c. If FMC objects to any modification determined by EPA to be necessary pursuant to this Paragraph, it may seek dispute resolution pursuant to Section XX (Dispute Resolution), Paragraph 84 (Record Review). The Response Action Plans, Remedial Design Work Plans, Remedial Action Work Plans, Operation and Maintenance Plans, and/or related work plans shall be modified in accordance with final resolution of the dispute.

d. FMC shall implement any work required by any modifications incorporated in the Response Action Plans, Remedial Design Work Plans, Remedial Action Work Plans,



Operation and Maintenance Plans, and/or in work plans developed in accordance with this Paragraph. \_\_\_\_\_

e. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions as otherwise provided in this Consent Decree.

28. FMC acknowledges and agrees that nothing in this Consent Decree, the Response Action Plans for any removal action, or the Remedial Design or Remedial Action Work Plans for any OU set forth in this Consent Decree constitutes a warranty or representation of any kind by EPA that compliance with the work requirements set forth in those plans will achieve the Performance Standards-Removal of the selected removal response actions set forth in the Removal Action Memoranda and the EPA-approved Response Action Plans for the removal actions or will achieve the Performance Standards-Remedial set forth in the applicable RODs for the remedial actions.

29. FMC shall, prior to any off-site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving facility's state and to the EPA Project Coordinator of such shipment of Waste Material. However, the requirement to notify EPA shall not apply to any off-site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

a. FMC shall include in the written notification the following information, where available: (1) the name and location of the facility to which the Waste Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. FMC shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as

decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

b. The identity of the receiving facility and state will be determined by FMC following the award of the contract for response action construction. FMC shall provide the information required by Paragraph 29.a. as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

### **VIII. REMEDY REVIEW**

30. Periodic Review. FMC shall conduct any studies and investigations as requested by EPA, in order to permit EPA to conduct reviews of whether a Remedial Action is protective of human health and the environment at least every five years as required by Section 121(c) of CERCLA and any applicable regulations.

31. EPA Selection of Further Response Actions. If EPA determines, at any time, that a response action is not protective of human health and the environment, EPA may select further response actions for the Site in accordance with the requirements of CERCLA and the NCP.

32. Opportunity To Comment. FMC and, if required by Sections 113(k)(2) or 117 of CERCLA, the public will be provided with an opportunity to comment on any further response actions proposed by EPA as a result of the review conducted pursuant to Section 121(c) of CERCLA and to submit written comments for the record during the comment period.

33. FMC's Obligation To Perform Further Response Actions. If EPA selects further response actions for the Site under Paragraph 31, FMC shall undertake such further response actions to the extent that the reopener conditions in Paragraph 100 or Paragraph 101 (United States' reservations of liability based on unknown conditions or new information) are satisfied.

All determinations made by EPA pursuant to this Paragraph 33 will be submitted to FMC in writing. FMC may invoke the procedures set forth in Section XX (Dispute Resolution) to dispute (1) EPA's determination that the reopener conditions of Paragraph 100 or Paragraph 101 of Section XXII (Covenants Not To Sue by Plaintiff) are satisfied, (2) EPA's determination that the response actions are not protective of human health and the environment, or (3) EPA's selection of the further response actions. Disputes pertaining to whether a response action is protective or to EPA's selection of further response actions shall be resolved pursuant to Paragraph 84 (Record Review).

34. Submissions of Plans. If FMC is required to perform further response actions pursuant to Paragraph 33, it shall submit a plan for such work to EPA for approval in accordance with the procedures set forth in Section XII (EPA Approval of Plans and Other Submissions) and shall implement the plan approved by EPA in accordance with the provisions of this Decree.

#### IX. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS

35.a. While conducting all sample collection and analysis activities required by this Consent Decree for the OU-7 ROD and the OU-10 ROD, FMC shall use quality assurance, quality control (QA/QC), and chain of custody procedures for all treatability, design, compliance and monitoring samples in accordance with "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations," (US EPA Quality Assurance Management Staff: August 1994) (EPA QA/R-5); "EPA NEIC Policies and Procedures Manual," (May 1986) (EPA 330/978-001-R); National Functional Guidelines for Inorganic Data Review (EPA 540/R-94/013) and Modifications to the National Functional Guidelines for Inorganic Data Review (EPA Region III: April 1993); National Functional Guidelines for Organic Data Review

(EPA 540/R-94/012) and Modifications to the National Functional Guidelines for Organic Data Review (EPA Region III: September 1994); "Region III Innovative Approaches to Data Validation," (EPA Region III: September 1994); "Data Quality Objectives Process for Superfund," (EPA 540/R-93/071: September 1994); and subsequent amendments to such guidelines upon notification by EPA to FMC of such amendment. Amended guidelines shall apply only to procedures conducted after such notification.

b. While conducting all sample collection and analysis activities required by this Consent Decree for the site stabilization removal action, the removal action for the operation of the wastewater treatment plant, the Removal Action - Buildings and the Removal Action - Basins, FMC shall use quality assurance, quality control, and chain of custody procedures in accordance with the following documents: "EPA NEIC Policies and Procedure Manual" (EPA Document 330/978-001-R); "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans," (QAMS-005/80 (December 1980)); "QA/QC Guidance for Removal Activities," (EPA/540/G-90/004 (April 1990)); "A Compendium of Superfund Field Operations Methods" (OSWER Directive No. 9355-0-14 (December 1987)); and subsequent amendments to such guidelines upon notification by EPA to FMC of such amendment. Amended guidelines shall apply only to procedures conducted after such notification. FMC shall consult with EPA in planning for, and prior to, all sampling and analyses required by an EPA-approved RAP. FMC shall use a laboratory(ies) which has a documented Quality Assurance Program that complies with EPA guidance document QAMS-005/80.

c. Prior to the commencement of any monitoring project under this Consent Decree, FMC shall submit to EPA for approval a Quality Assurance Project Plan (QAPP) that is

consistent with the NCP and applicable guidance documents. If relevant to the proceeding, the Parties agree that validated sampling data generated in accordance with the QAPP(s) and reviewed and approved by EPA shall be admissible as evidence without objection, in any proceeding under this Decree. FMC shall ensure that EPA personnel and its authorized representatives are allowed access at reasonable times to all laboratories utilized by FMC in implementing this Consent Decree. In addition, FMC shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring. FMC shall ensure that the laboratories it utilizes for the analysis of samples taken pursuant to this Decree perform all analyses according to accepted EPA methods. Accepted EPA methods consist of those methods which are documented in the "Contract Lab Program Statement of Work for Inorganic Analysis" and the "Contract Lab Program Statement of Work for Organic Analysis," dated February 1988, methods presented in Update III of the Third Edition of US EPA SW-846, and any amendments made thereto during the course of the implementation of this Decree or such other methods as are approved by EPA. FMC shall ensure that all laboratories it utilizes for analysis of samples taken pursuant to this Consent Decree participate in an EPA or EPA-equivalent QA/QC program. FMC shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Decree will be conducted in accordance with the procedures set forth in the QAPP approved by EPA.

36. Upon request, FMC shall allow split or duplicate samples to be taken by EPA or its authorized representatives. FMC shall notify EPA not less than 28 days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall

allow FMC to take split or duplicate samples of any samples it takes as part of EPA's oversight of FMC's implementation of the Work. The costs incurred by EPA with respect to split or duplicate samples taken by EPA are deemed to be Future Response Costs as set forth in Paragraph 69.

37. Consistent with the provisions of Section XI (Reporting Requirements) and this Section IX (Quality Assurance, Sampling, and Data Analysis), FMC shall make available to EPA upon request one copy of the results of all sampling and/or tests or other data obtained or generated by or on behalf of FMC with respect to the Site and/or the implementation of this Consent Decree.

38. Notwithstanding any provision of this Consent Decree, the United States hereby retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA and any other applicable statutes or regulations.

#### **X. ACCESS AND INSTITUTIONAL CONTROLS**

39. Commencing upon the date of lodging of this Consent Decree, FMC agrees to provide the United States and its representatives, including EPA and its contractors, access at all reasonable times to the Site and any other property to which access is required for the implementation of this Consent Decree, to the extent access to the property is controlled by FMC, for the purposes of conducting any activity related to this Consent Decree including, but not limited to:

- a. monitoring the Work;
- b. verifying any data or information submitted to the United States;

- c. conducting investigations relating to contamination at or near the Site;
- d. obtaining samples;
- e. assessing the need for, planning, or implementing additional response actions at or near the Site;
- f. inspecting and copying records, operating logs, contracts, or other documents maintained or generated by FMC or its agents, consistent with Section XXV (Access to Information); and
- g. assessing FMC's compliance with this Consent Decree.

40. Commencing on the date of lodging of this Consent Decree, FMC agrees to refrain from using the Site, or such other property, in any manner that would interfere with or adversely affect the integrity or protectiveness of the response actions to be implemented pursuant to this Consent Decree.

41. If the Site, or any other property where access and/or land/water use restrictions are needed to implement this Consent Decree, is owned or controlled by persons other than FMC, FMC shall use its best efforts to secure from such persons:

- a. an agreement to provide access thereto for FMC, as well as for the United States on behalf of EPA, as well as its representatives (including contractors), for the purpose of conducting any activity related to this Consent Decree including, but not limited to, those activities listed in Paragraph 39 of this Consent Decree;
- b. an agreement, enforceable by FMC and the United States, to abide by the obligations and restrictions described in Paragraph 40 of this Consent Decree, or that are

otherwise necessary to implement, ensure non-interference with, or ensure the protectiveness of the response actions to be implemented pursuant to this Consent Decree; and

c. the execution and recordation in the Clerk's Office [or Registry of Deeds or other appropriate land records office] of Warren County, Virginia, of an easement, running with the land, that (i) grants a right of access for the purpose of conducting any activity related to this Consent Decree including, but not limited to, those activities listed in Paragraph 39 of this Consent Decree, and (ii) grants the right to enforce the land/water use restrictions described in Paragraph 40 of this Consent Decree, or other restrictions that EPA determines are necessary to implement, ensure non-interference with, or ensure the protectiveness of the response actions to be implemented pursuant to this Consent Decree. The access rights and/or rights to enforce land/water use restrictions shall be granted to (i) the United States, on behalf of EPA, and its representatives and (ii) FMC. Within 45 days of entry of this Consent Decree, FMC shall submit to EPA for review and approval with respect to such property:

(1) a draft easement that is enforceable under the laws of the Commonwealth of Virginia, free and clear of all prior liens and encumbrances (except as approved by EPA), and acceptable under the Attorney General's Title Regulations promulgated pursuant to 40 U.S.C. § 255; and

(2) a current title commitment or report prepared in accordance with the U.S. Department of Justice Standards for the Preparation of Title Evidence in Land Acquisitions by the United States (1970) (the Standards).

Within 15 days of EPA's approval and acceptance of the easement, FMC shall update the title search and, if it is determined that nothing has occurred since the effective date of the



commitment or report to affect the title adversely, FMC will use its best efforts to cause the persons who own or control the Site to record the easement with the Clerk's Office [or Registry of Deeds or other appropriate office] of Warren County. Within 30 days of the recording of the easement, FMC shall provide EPA with final title evidence acceptable under the Standards, and a certified copy of the original recorded easement showing the clerk's recording stamps.

42. If any access or land/water use restriction agreements required by Paragraph 41 of this Consent Decree are not obtained within 45 days of the entry of this Consent Decree, or any access easements or restrictive easements required by Paragraph 41 of this Consent Decree are not submitted to EPA in draft form within 45 days of the date of entry of this Consent Decree, FMC shall promptly notify the United States in writing, and shall include in that notification a summary of the steps that it has taken to attempt to comply with Paragraph 41 of this Consent Decree. The United States may, as it deems appropriate, assist FMC in obtaining access or land/water use restrictions, either in the form of contractual agreements or in the form of easements running with the land. FMC shall reimburse the United States in accordance with the procedures in Section XVII (Reimbursement of Response Costs), for all costs incurred, direct or indirect, by the United States in obtaining such access and/or land/water use restrictions including, but not limited to, the cost of attorney time and the amount of monetary consideration paid or just compensation.

43. If EPA determines that land/water use restrictions in the form of state or local laws, regulations, ordinances or other governmental controls are needed to implement the response actions selected in a Removal Action Memorandum or in a ROD, ensure the integrity and

protectiveness thereof, or ensure non-interference therewith, FMC shall cooperate with EPA's efforts to secure such governmental controls.

44. Notwithstanding any provision of this Consent Decree, the United States retains all of its access authorities and rights, as well as all of its rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA and any other applicable statute or regulations.

#### **XI. REPORTING REQUIREMENTS**

45. In addition to any other requirement of this Consent Decree, FMC shall submit to EPA two copies of written monthly progress reports that: (a) describe the actions which have been taken toward achieving compliance with this Consent Decree during the previous month; (b) include a summary of all results, including validation reports, of sampling and tests and all other data received or generated by FMC or its contractors or agents in the previous month; (c) identify all work plans, plans and other deliverables required by this Consent Decree completed and submitted during the previous month; (d) describe all actions, including, but not limited to, data collection and implementation of work plans, which are scheduled for the next four weeks and provide other information relating to the progress of construction, including, but not limited to, critical path diagrams, Gantt charts or Pert charts; (e) describe problems encountered or anticipated, any actions taken to prevent or mitigate such problems and a schedule for completion of such actions; (f) include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of the Work, and a description of efforts made to mitigate those delays or anticipated delays; (g) include any modifications to the work plans or other schedules that FMC has proposed to EPA or that have

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been approved by EPA; (h) include copies of any progress reports prepared pursuant to Paragraph 45.A.; and (i) describe all activities undertaken in support of EPA's community relations plan for the Site during the previous month and those to be undertaken in the next four weeks. FMC shall submit these progress reports to EPA by the tenth day of every month following the effective date of this Consent Decree until completion of construction of all future response actions at the Site. Thereafter, until EPA notifies FMC pursuant to Paragraph 65.e.ii. of Section XV (Certification of Completion), FMC shall submit progress reports regarding O & M to EPA by the tenth day following each three-month period unless EPA directs FMC to submit progress reports for some different period. If requested by EPA, FMC shall also provide briefings for EPA to discuss the progress of the Work.

45.A. During implementation of the Removal Action - Buildings and the Removal Action - Basins (following EPA approval of a RAP until written notification by EPA to FMC that construction of the Removal Action - Buildings and the Removal Action - Basins is complete), FMC shall submit to EPA progress reports for the Removal Action - Buildings and the Removal Action - Basins on a weekly basis or for such longer interval as may be determined in writing by the EPA Project Coordinator. The progress reports shall be sent to EPA's Project Coordinator by hand delivery, mail, electronic mail or facsimile on the Monday following a weekly reporting period (or when Monday is a Federal holiday, the following Working Day), or such longer period as may be specified in writing by the EPA Project Coordinator. The progress reports shall include, at a minimum: 1) a description of the response actions completed and the actions that have been taken toward achieving compliance with this Consent Decree during the reporting period; 2) a description of all data anticipated and all activities scheduled for the next

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reporting period; 3) a description of any problems encountered or anticipated; 4) any actions taken to prevent or mitigate such problems; 5) a schedule for completion of such actions; 6) a summary of pertinent analytical data received during the reporting period; and 7) all modifications to the response action, RAP and schedule made in accordance with this Consent Decree during the reporting period.

45.B. FMC shall submit written Final Reports to EPA within 20 days of the date FMC concludes that it has completed implementation of each of the following: (i) the Supplemental Work Plan for the Second Modification to UAO III-90-12-DC; (ii) the Work Plan for UAO III-90-12-DC; (iii) the RAP for the items identified in Paragraphs 21.a - 21.l.; (iv) the RAP for the items identified in Paragraphs 21.A.a. - 21.A.e.; and (v) the RAP for the items identified in Paragraphs 22.a-22.d. The written reports shall detail the work undertaken to implement the Supplemental Work Plan for the Second Modification to UAO III-90-12-DC, the Work Plan for UAO III-90-12-DC, the RAP for the items identified in Paragraphs 21.a.- 21.l., the RAP for the items identified in Paragraphs 21.A.a. - 21.A.e., and the RAP for the items identified in Paragraphs 22.a-22.d. and shall be certified by FMC in accordance with the terms of Section XV (Certification of Completion) and shall be subject to EPA approval according to the provisions of Section XII (EPA Approval of Plans and Other Submissions). EPA will review the adequacy of FMC's implementation of the Supplemental Work Plan for the Second Modification to UAO III-90-12-DC, the Work Plan for UAO III-90-12-DC, the RAP for the items identified in Paragraphs 21.a. - 21.l., the RAP for the items identified in Paragraphs 21.A.a. - 21.A.e. and the RAP for the items identified in Paragraphs 22.a-22.d. EPA will notify FMC, in writing, of any discrepancies in the Final Reports or deficiencies in the execution of the Supplemental Work Plan for the

Second Modification to UAO III-90-12-DC, the Work Plan for UAO III-90-12-DC, the RAP for the items identified in Paragraphs 21.a. - 21.l., the RAP for the items identified in Paragraphs 21.A.a. - 21.A.e. or the RAP for the items identified in Paragraphs 22.a-22.d. and the actions required to correct such discrepancies or deficiencies. Within 15 days of receipt of notification by EPA, or as otherwise specified by EPA, FMC shall, as directed by EPA, amend the Final Reports, develop additional plans or amend the existing Supplemental Work Plan under the Second Modification to UAO III-90-12-DC, the existing Work Plan under UAO-III-90-12-DC, the existing RAP for Paragraphs 21.a. - 21.l., the existing RAP for Paragraphs 21.A.a. - 21.A.e. or the existing RAP for Paragraphs 22.a-22.d. to address such discrepancies or deficiencies. Any additional plan or amendment to the Supplemental Work Plan, the Work Plan or the RAPs will be subject to the approval procedures in Section XII (EPA Approval of Plans or Other Submissions). FMC shall perform all actions approved by EPA in a manner consistent with the NCP and all applicable Federal laws and regulations, as required by the NCP.

46. FMC shall notify EPA of any change in the schedule described in the monthly progress report for the performance of any activity, including, but not limited to, data collection and implementation of work plans, no later than seven days prior to the performance of the activity.

47. Upon the occurrence of any event during performance of the Work that FMC is required to report pursuant to Section 103 of CERCLA or Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA), FMC shall within 24 hours of the onset of such event orally notify the EPA Project Coordinator or the Alternate EPA Project Coordinator (in the event of the unavailability of the EPA Project Coordinator), or, in the event

that neither the EPA Project Coordinator or Alternate EPA Project Coordinator is available, the Emergency Response Section, Region III, U.S. Environmental Protection Agency. These reporting requirements are in addition to the reporting required by CERCLA Section 103 or EPCRA Section 304.

48. Within 20 days of the onset of such an event, FMC shall furnish to EPA a written report, signed by FMC's Project Coordinator, setting forth the events which occurred and the measures taken, and to be taken, in response thereto. Within 30 days of the conclusion of such an event, FMC shall submit a report setting forth all actions taken in response thereto.

49. FMC shall submit two copies of all plans, reports and data required by the EPA-approved Response Action Plans, the Remedial Design Work Plans, the Remedial Action Work Plans, or any other approved plans to EPA in accordance with the schedules set forth in such plans. Unless otherwise expressly provided in this Consent Decree, submittals shall be sent by hand delivery or by electronic, certified or overnight mail to the EPA Project Coordinator.

50. All reports and other documents submitted by FMC to EPA (other than monthly progress reports and progress reports prepared pursuant to Paragraph 45.A. above) which purport to document FMC's compliance with the terms of this Consent Decree shall be signed by a responsible corporate officer of FMC or his/her duly authorized representative as provided for in 40 C.F.R. § 270.11.

## **XII. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS**

51. After review of any plan, report or other item which is required to be submitted for approval pursuant to this Consent Decree, EPA shall in writing: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission

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to cure the deficiencies; (d) disapprove, in whole or in part, the submission, specifying the deficiencies and directing that FMC modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing FMC at least one notice of deficiency and an opportunity to cure within 15 days of receipt of notice for removal action submittals and 30 days of receipt of notice for remedial action submittals, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects and EPA decides that the deficiencies in the submission(s) under consideration indicate to EPA a bad faith lack of effort to submit an acceptable deliverable. The 15-day and 30-day periods for curing deficiencies may be extended by EPA at its sole discretion.

52. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 51(a), (b), or (c), FMC shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA subject only to its right to invoke the dispute resolution procedures set forth in Section XX (Dispute Resolution) with respect to the modifications or conditions made by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Paragraph 51 and the submission has a material defect, EPA retains its right to seek stipulated penalties, as provided in Section XXI (Stipulated Penalties).

53. ~~a.~~ Upon receipt of a notice of disapproval pursuant to Paragraph 51(d), FMC shall, within 15 days for removal action submittals and 30 days for remedial action submittals or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval. Any stipulated penalties applicable to the submission, as provided in Section XXI, shall accrue during the applicable 15-day or 30-day or otherwise

specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 51 and 52.

b. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 51(d), FMC shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve FMC of any liability for stipulated penalties under Section XXI (Stipulated Penalties).

54. In the event that a resubmitted plan, report or other item, or portion thereof, is disapproved by EPA, EPA may again require FMC to correct the deficiencies, in accordance with the preceding Paragraphs. EPA also retains the right to modify or develop the plan, report or other item. FMC shall implement any such plan, report, or item as modified or developed by EPA, subject only to its right to invoke the procedures set forth in Section XX (Dispute Resolution).

55. If upon resubmission, a plan, report, or item is disapproved or modified by EPA due to a material defect, and EPA so notifies FMC, FMC shall be deemed to have failed to submit such plan, report, or item timely and adequately unless FMC invokes the dispute resolution procedures set forth in Section XX (Dispute Resolution) and EPA's action is overturned pursuant to that section. The provisions of Section XX (Dispute Resolution) and Section XXI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during dispute resolution. If EPA's disapproval or modification is upheld, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XXI.



56. All plans, reports, and other items required to be submitted to EPA under this Consent Decree shall, upon approval or modification by EPA, be enforceable under this Consent Decree. In the event EPA approves or modifies a portion of a plan, report, or other item required to be submitted to EPA under this Consent Decree, the approved or modified portion shall be enforceable under this Consent Decree.

### **XIII. PROJECT COORDINATORS**

57. The EPA Project Coordinator and Alternate Project Coordinator for this Site are:

#### **EPA Project Coordinator**

Bonnie Gross (3HS23)  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103  
(215) 814-3229  
(215) 814-3001 (fax)  
gross.bonnie@epamail.epa.gov (e-mail)

#### **Alternate Project Coordinator**

Peter Ludzia (3HS23)  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103  
(215) 814-3224  
(215) 814-3001 (fax)  
ludzia.peter@epamail.epa.gov (e-mail)

The FMC Project Coordinator and Alternate Project Coordinator for this Site are:

#### **FMC Project Coordinator**

William G. Cutler  
FMC Corporation

1735 Market Street, 19th Floor  
Philadelphia, Pennsylvania 19103  
(215) 299-6206  
(215) 299-6947 (fax)  
william\_cutler@fmc.com (e-mail)

Alternate Project Coordinator

Robert T. Forbes  
FMC Corporation  
1735 Market Street, 19th Floor  
Philadelphia, Pennsylvania 19103  
(215) 299-6260  
(215) 299-6947 (fax)  
robert\_forbes@fmc.com (e-mail)

If a Project Coordinator or Alternate Project Coordinator initially designated is changed, the identity of the successor will be given to EPA or FMC at least five working days before the change occurs, unless impracticable, but in no event later than the actual day the change is made. FMC's Project Coordinator or Alternate Project Coordinator shall be subject to disapproval by EPA and shall have the technical expertise sufficient to adequately oversee all aspects of the Work. FMC's Project Coordinator and Alternate Project Coordinator shall not be an attorney for FMC in this matter. He or she may assign other representatives, including other contractors, to serve as a Site representative for oversight of performance of daily operations during response activities.

58. EPA may designate other representatives, including, but not limited to, EPA employees, and federal contractors and consultants, to observe and monitor the progress of any activity undertaken pursuant to this Consent Decree. EPA's Project Coordinator and Alternate Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager

(RPM) and an On-Scene Coordinator (OSC) by the National Contingency Plan, 40 C.F.R. Part 300. In addition, EPA's Project Coordinator and Alternate Project Coordinator shall have authority, consistent with the National Contingency Plan, to halt any Work required by this Consent Decree and to take any necessary response action when s/he determines that conditions at the Site constitute an emergency situation or may present an immediate threat to public health or welfare or the environment due to release or threatened release of Waste Material.

59. EPA's Project Coordinator and FMC's Project Coordinator will meet, at a minimum, on a monthly basis. Such meetings may be in person or by telephone at the option of the EPA Project Coordinator.

#### **XIV. ASSURANCE OF ABILITY TO COMPLETE WORK**

60. FMC shall establish and maintain financial security in an amount equal to two-thirds of (1) the estimated cost of \$8.8 million to perform the time-critical items of the Removal Action - Buildings; (2) the estimated cost of \$6.1 million to perform the non-time critical items of the Removal Action - Buildings, provided that FMC is obligated to perform, or if not obligated, elects to perform the response action for the sewers contained in the Removal Action Memorandum which is identified in Paragraph 21.A.e. of this Consent Decree, or the estimated cost of \$3.4 million to perform the non-time critical items of the Removal Action - Buildings if FMC is not obligated to perform or does not elect to perform the selected response action for the sewers; (3) the cost estimated in the Removal Action Memorandum for the Removal Action - Basins; (4) the cost estimated in ROD 4; and (5) the cost estimated in ROD 5 in one or more of the following forms:

- a. A surety bond guaranteeing performance of the Work;

b. One or more irrevocable letters of credit equaling two-thirds of the estimated cost of the Work;

c. A trust fund;

d. A guarantee to perform the Work by one or more parent corporations or subsidiaries, or by one or more unrelated corporations that have a substantial business relationship with FMC; or

e. A demonstration that FMC satisfies the requirements of 40 C.F.R. Part 264.143(f).

61. The time for establishing and maintaining the financial security (1) for the time critical items of the Removal Action - Buildings shall be 10 days after the date EPA approves the RAP described in Paragraph 21; (2) for the non-time critical items of the Removal Action - Buildings shall be 10 days after the date EPA approves the RAP described in Paragraph 21.A.; (3) for the Removal Action - Basins shall be February 1, 2000, provided that FMC is obligated to perform, or if not obligated, elects to perform the Removal Action - Basins response action; (4) for ROD 4 shall be 60 days after issuance of ROD 4 provided that FMC is obligated to perform or, if not obligated, elects to perform the ROD 4 response action; and (5) for ROD 5 shall be 60 days after issuance of ROD 5 provided that FMC is obligated to perform or, if not obligated, elects to perform the ROD 5 response action.

62. If FMC seeks to demonstrate the ability to complete the Work through a guarantee by a third party pursuant to Paragraph 60.d. of this Consent Decree, FMC shall demonstrate that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f). If FMC seeks to demonstrate its ability to complete the Work by means of the financial test or the corporate

guarantee pursuant to Paragraph 60.d. or 60.e., it shall resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the effective date of this Consent Decree. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section are inadequate, FMC shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 60 of this Consent Decree. FMC's inability to demonstrate financial ability to complete the Work shall not excuse performance of any activities required under this Consent Decree.

63. If FMC can demonstrate to EPA that two-thirds of the estimated cost to complete the response action for the time critical items of the Removal Action - Buildings, the non-time critical items of the Removal Action - Buildings, the Removal Action - Basins, ROD 4 or ROD 5 has diminished below the amount set forth in Paragraph 60 above for that particular response action after entry of this Consent Decree, it may, on any anniversary date of entry of this Consent Decree, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section for that particular response action to two-thirds of the estimated cost of the remaining work to be performed to complete that particular response action. FMC shall submit a proposal for such reduction to EPA in accordance with the requirements of this Section, and may reduce the amount of the security upon approval by EPA. In the event of a dispute, FMC may invoke the dispute resolution procedures set forth in Section XX (Dispute Resolution) and may reduce the amount of the security in accordance with the final administrative or judicial decision resolving the dispute.

64. FMC may change the form of financial assurance provided under this Section at any time, upon notice to and approval by EPA, provided that the new form of assurance meets the requirements of this Section. In the event of a dispute, FMC may invoke the dispute resolution procedures set forth in Section XX (Dispute Resolution) and may change the form of the financial assurance only in accordance with the final administrative or judicial decision resolving the dispute.

#### **XV. CERTIFICATION OF COMPLETION**

##### **65. Completion of the Work.**

##### **a. Completion of the Removal Action - Buildings.**

i. Within 90 days after FMC concludes that the Removal Action - Buildings has been fully performed and the Performance Standards-Removal for the Removal Action - Buildings have been attained, FMC shall schedule and conduct a pre-certification inspection to be attended by FMC and EPA. If, after the pre-certification inspection, FMC still believes that the Removal Action - Buildings has been fully performed and the Performance Standards-Removal for the Removal Action - Buildings have been attained, FMC shall submit a written report requesting certification to EPA for approval, with a copy to the State, pursuant to Section XII (EPA Approval of Plans and Other Submissions) within 30 days of the inspection. In the report, a registered professional engineer and FMC's Project Coordinator shall state that the Removal Action - Buildings has been completed in full satisfaction of the requirements of this Consent Decree. The written report shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by a responsible corporate official of FMC or FMC's Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If, after completion of the pre-certification inspection and receipt and review of the written report, EPA, after reasonable opportunity to review and comment by the State, determines that the Removal Action - Buildings or any portion thereof has not been completed in accordance with this Consent Decree or that the Performance Standards-Removal for the Removal Action - Buildings have not been achieved, EPA will notify FMC in writing of the activities that must be undertaken by FMC pursuant to this Consent Decree to complete the Removal Action - Buildings and to achieve the Performance Standards-Removal for the Removal Action - Buildings. Provided, however, that EPA may only require FMC to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the removal action selected in the Removal Action Memorandum," as that term is defined in Paragraph 27.b. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree or require FMC to submit a schedule to EPA for approval pursuant to Section XII (EPA Approval of Plans and Other Submissions). FMC shall perform all activities described in the notice in accordance with the specifications and schedules established pursuant to this Paragraph, subject to its right to invoke the dispute resolution procedures set forth in Section XX (Dispute Resolution).

ii. If EPA concludes, based on the initial or any subsequent report requesting Certification of Completion and after a reasonable opportunity for review and comment by the State, that the Removal Action - Buildings has been performed in accordance with this Consent

Decree and that the Performance Standards-Removal for the Removal Action - Buildings have been achieved, EPA will so certify in writing to FMC. This certification shall constitute the Certification of Completion of the Removal Action - Buildings for purposes of this Consent Decree, including, but not limited to, Section XXII (Covenants Not to Sue by Plaintiff). Certification of Completion of the Removal Action - Buildings shall not affect FMC's remaining obligations except as expressly provided under this Consent Decree.

b. Completion of the Removal Action - Basins.

i. Within 90 days after FMC concludes that the Removal Action - Basins has been fully performed and the Performance Standards-Removal for the Removal Action - Basins have been attained, FMC shall schedule and conduct a pre-certification inspection to be attended by FMC and EPA. If, after the pre-certification inspection, FMC still believes that the Removal Action - Basins has been fully performed and the Performance Standards-Removal for the Removal Action - Basins have been attained, FMC shall submit a written report requesting certification to EPA for approval, with a copy to the State, pursuant to Section XII (EPA Approval of Plans and Other Submissions) within 30 days of the inspection. In the report, a registered professional engineer and FMC's Project Coordinator shall state that the Removal Action - Basins has been completed in full satisfaction of the requirements of this Consent Decree. The written report shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by a responsible corporate official of FMC or FMC's Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for

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submitting false information, including the possibility of fine and imprisonment for knowing violations.

If, after completion of the pre-certification inspection and receipt and review of the written report, EPA, after reasonable opportunity to review and comment by the State, determines that the Removal Action - Basins or any portion thereof has not been completed in accordance with this Consent Decree or that the Performance Standards-Removal for the Removal Action - Basins have not been achieved, EPA will notify FMC in writing of the activities that must be undertaken by FMC pursuant to this Consent Decree to complete the Removal Action - Basins and achieve the Performance Standards-Removal for the Removal Action - Basins. Provided, however, that EPA may only require FMC to perform such activities pursuant to this Paragraph - to the extent that such activities are consistent with the "scope of the removal action selected in the Removal Action Memorandum," as that term is defined in Paragraph 27.b. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree or require FMC to submit a schedule to EPA for approval pursuant to Section XII (EPA Approval of Plans and Other Submissions). FMC shall perform all activities described in the notice in accordance with the specifications and schedules established pursuant to this Paragraph, subject to its right to invoke the dispute resolution procedures set forth in Section XX (Dispute Resolution).

ii. If EPA concludes, based on the initial or any subsequent report requesting Certification of Completion and after a reasonable opportunity for review and comment by the State, that the Removal Action - Basins has been performed in accordance with this Consent Decree and that the Performance Standards-Removal for the Removal Action - Basins have been

achieved, EPA will so certify in writing to FMC. This certification shall constitute the Certification of Completion of the Removal Action - Basins for purposes of this Consent Decree, including, but not limited to, Section XXII (Covenants Not to Sue by Plaintiff). Certification of Completion of the Removal Action - Basins shall not affect FMC's remaining obligations except as expressly provided under this Consent Decree.

c. Completion of the OU-7 Remedial Action.

i. Within 90 days after FMC concludes that the OU-7 Remedial Action has been fully performed and the Performance Standards-Remedial for the OU-7 Remedial Action have been attained, FMC shall schedule and conduct a pre-certification inspection to be attended by FMC and EPA. If, after the pre-certification inspection, FMC still believes that the OU-7 Remedial Action has been fully performed and the Performance Standards-Remedial for the OU-7 Remedial Action have been attained, FMC shall submit a written report requesting certification to EPA for approval, with a copy to the State, pursuant to Section XII (EPA Approval of Plans and Other Submissions) within 30 days of the inspection. In the report, a registered professional engineer and FMC's Project Coordinator shall state that the OU-7 Remedial Action has been completed in full satisfaction of the requirements of this Consent Decree. The written report shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by a responsible corporate official of FMC or FMC's Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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If, after completion of the pre-certification inspection and receipt and review of the written report, EPA, after reasonable opportunity to review and comment by the State, determines that the OU-7 Remedial Action or any portion thereof has not been completed in accordance with this Consent Decree or that the Performance Standards-Remedial for the OU-7 Remedial Action have not been achieved, EPA will notify FMC in writing of the activities that must be undertaken by FMC pursuant to this Consent Decree to complete the OU-7 Remedial Action and achieve the Performance Standards-Remedial for the OU-7 Remedial Action. Provided, however, that EPA may only require FMC to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the remedy selected in the ROD," as that term is defined in Paragraph 27.b. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree or require FMC to submit a schedule to EPA for approval pursuant to Section XII (EPA Approval of Plans and Other Submissions). FMC shall perform all activities described in the notice in accordance with the specifications and schedules established pursuant to this Paragraph, subject to its right to invoke the dispute resolution procedures set forth in Section XX (Dispute Resolution).

ii. If EPA concludes, based on the initial or any subsequent report requesting Certification of Completion and after a reasonable opportunity for review and comment by the State, that the OU-7 Remedial Action has been performed in accordance with this Consent Decree and that the Performance Standards-Remedial for the OU-7 Remedial Action have been achieved, EPA will so certify in writing to FMC. This certification shall constitute the Certification of Completion of the OU-7 Remedial Action for purposes of this Consent Decree,

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including, but not limited to, Section XXII (Covenants Not to Sue by Plaintiff). Certification of Completion of the OU-7 Remedial Action shall not affect FMC's remaining obligations except as expressly provided under this Consent Decree.

**d. Completion of the OU-10 Remedial Action.**

i. Within 90 days after FMC concludes that the OU-10 Remedial Action has been fully performed and the Performance Standards-Remedial for the OU-10 Remedial Action have been attained, FMC shall schedule and conduct a pre-certification inspection to be attended by FMC and EPA. If, after the pre-certification inspection, FMC still believes that the OU-10 Remedial Action has been fully performed and the Performance Standards-Remedial for the OU-10 Remedial Action have been attained, FMC shall submit a written report requesting certification to EPA for approval, with a copy to the State, pursuant to Section XII (EPA Approval of Plans and Other Submissions) within 30 days of the inspection. In the report, a registered professional engineer and FMC's Project Coordinator shall state that the OU-10 Remedial Action has been completed in full satisfaction of the requirements of this Consent Decree. The written report shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by a responsible corporate official of FMC or FMC's Project Coordinator:

**To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.**

If, after completion of the pre-certification inspection and receipt and review of the written report, EPA, after reasonable opportunity to review and comment by the State, determines that

the OU-10 Remedial Action or any portion thereof has not been completed in accordance with this Consent Decree or that the Performance Standards-Remedial for the OU-10 Remedial Action have not been achieved, EPA will notify FMC in writing of the activities that must be undertaken by FMC pursuant to this Consent Decree to complete the OU-10 Remedial Action and achieve the Performance Standards-Remedial for the OU-10 Remedial Action. Provided, however, that EPA may only require FMC to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the remedy selected in the ROD," as that term is defined in Paragraph 27.b. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree or require FMC to submit a schedule to EPA for approval pursuant to Section XII (EPA Approval of Plans and Other Submissions). FMC shall perform all activities described in the notice in accordance with the specifications and schedules established pursuant to this Paragraph, subject to its right to invoke the dispute resolution procedures set forth in Section XX (Dispute Resolution).

ii. If EPA concludes, based on the initial or any subsequent report requesting Certification of Completion and after a reasonable opportunity for review and comment by the State, that the OU-10 Remedial Action has been performed in accordance with this Consent Decree and that the Performance Standards-Remedial for the OU-10 Remedial Action have been achieved, EPA will so certify in writing to FMC. This certification shall constitute the Certification of Completion of the OU-10 Remedial Action for purposes of this Consent Decree, including, but not limited to, Section XXII (Covenants Not to Sue by Plaintiff). Certification of Completion of the OU-10 Remedial Action shall not affect FMC's remaining obligations except as expressly provided under this Consent Decree.

**e. Completion of the Work.**

**i. Within 90 days after FMC concludes that all phases of the Work (including O & M) have been fully performed, FMC shall schedule and conduct a pre-certification inspection to be attended by FMC and EPA. If, after the pre-certification inspection, FMC still believes that the Work has been fully performed, FMC shall submit a written report by a registered professional engineer stating that the Work has been completed in full satisfaction of the requirements of this Consent Decree. The report shall contain the following statement, signed by a responsible corporate official of FMC or FMC's Project Coordinator:**

**To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.**

**If, after review of the written report, EPA, after reasonable opportunity to review and comment by the State, determines that any portion of the Work has not been completed in accordance with this Consent Decree, EPA will notify FMC in writing of the activities that must be undertaken by FMC pursuant to this Consent Decree to complete the Work. Provided, however, that EPA may only require FMC to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the removal action selected in the Removal Action Memorandum" and the "scope of the remedy selected in the ROD," as those terms are defined in Paragraph 27.b. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree or require FMC to submit a schedule to EPA for approval pursuant to Section XII (EPA Approval of Plans and Other Submissions). FMC shall perform all activities described in the notice in accordance with the specifications and schedules established**

therein, subject to its right to invoke the dispute resolution procedures set forth in Section XX (Dispute Resolution).

ii. If EPA concludes, based on the initial or any subsequent request for Certification of Completion by FMC and after a reasonable opportunity for review and comment by the State, that the Work has been performed in accordance with this Consent Decree, EPA will so notify FMC in writing.

#### **XVI. EMERGENCY RESPONSE**

66. In the event of any action or occurrence during the performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, FMC shall, subject to Paragraph 67, immediately take all appropriate action to prevent, abate, or minimize such release or threat of release, and shall immediately notify the EPA Project Coordinator, or, if the Project Coordinator is unavailable, EPA's Alternate Project Coordinator. If neither of these persons is available, FMC shall notify the EPA Region III Hotline at (215) 814-3255. FMC shall take such actions in consultation with EPA's Project Coordinator or other available authorized EPA officer and in accordance with all applicable provisions of the Health and Safety Plans, the Contingency Plans, and any other applicable plans or documents developed pursuant to this Consent Decree. In the event that FMC fails to take appropriate response action as required by this Section, and EPA takes such action instead, FMC shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVII. (Reimbursement of Response Costs).

67. Nothing in the preceding Paragraph or in this Consent Decree shall be deemed to limit any authority of the United States (a) to take all appropriate action to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, or (b) to direct or order such action, or seek an order from the Court, to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, subject to Section XXII (Covenants Not to Sue by Plaintiff).

#### **XVII. REIMBURSEMENT OF RESPONSE COSTS**

68.a. Within 30 days of the effective date of this Consent Decree, FMC shall pay to the EPA Hazardous Substance Superfund \$8.5 million, plus Interest accruing from March 1, 1999, in reimbursement of Past Response Costs, by FedWire Electronic Funds Transfer (EFT or wire transfer) to the U.S. Department of Justice account in accordance with current electronic funds transfer procedures, referencing U.S.A.O. file number 1999V00136, the EPA Region and Site/Spill ID # 03-D1 and DOJ case number 90-11-2-372A. Payment shall be made in accordance with instructions provided in writing to FMC by the Financial Litigation Unit of the United States Attorney's Office for the Western District of Virginia following lodging of the Consent Decree. Any payments received by the Department of Justice after 4:00 P.M. (Eastern Standard Time) will be credited on the next business day. FMC shall send notice that such payment has been made to the United States as specified in Section XXVII (Notices and Submissions) and to the Docket Clerk (3RCOO), U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, PA 19103-2029.



b. Within 30 days of the effective date of this Consent Decree, FMC shall pay to the EPA Hazardous Substance Superfund \$578,200.00 in reimbursement of Interim Response Costs. Payment shall be made in accordance with the terms of payment set forth in Paragraph 68.a. above.

69. FMC shall reimburse the EPA Hazardous Substance Superfund for Future Response Costs incurred in a manner not inconsistent with the National Contingency Plan in amounts not to exceed \$500,000 each year commencing on the date of entry of this Consent Decree. In accordance with the written agreement between FMC and the Virginia Department of Environmental Quality, FMC shall reimburse the Commonwealth of Virginia or the Virginia Department of Environmental Quality for the Commonwealth of Virginia's future oversight costs incurred in a manner not inconsistent with the National Contingency Plan in amounts not to exceed \$100,000 each year commencing on the date of entry of this Consent Decree. The amounts payable to EPA and the Commonwealth of Virginia as required by the preceding sentences of this Paragraph shall be paid to correspond with each twelve-month period until receipt of written notification by EPA to FMC that construction of the last removal action or OU which FMC performs is complete. Notwithstanding the dollar limitations of the preceding sentences of this Paragraph, FMC shall reimburse the EPA Hazardous Substance Superfund for all of those Future Response Costs incurred in a manner not inconsistent with the National Contingency Plan which result from actions taken as an Emergency Response as provided in Section XVI (Emergency Response) or taken as a result of a work takeover as provided in Paragraph 104. After receipt of written notification from EPA that the construction of the last removal action or OU which FMC performs is complete, FMC shall reimburse the EPA

Hazardous Substance Superfund for Future Response Costs incurred in a manner not inconsistent with the National Contingency Plan in amounts not to exceed \$50,000 for each twelve-month period thereafter. In accordance with the written agreement between FMC and the Virginia Department of Environmental Quality, FMC shall reimburse the Commonwealth of Virginia or the Virginia Department of Environmental Quality for the Commonwealth of Virginia's future oversight costs incurred in a manner not inconsistent with the National Contingency Plan in amounts not to exceed \$10,000 for each twelve-month period after receipt of written notification by EPA to FMC that construction of the last removal action or OU which FMC performs is complete. For each twelve-month period, the United States will send FMC a bill(s) requiring payment of Future Response Costs that includes a cost summary, which includes direct and indirect costs incurred by EPA, DOJ and its contractors on a periodic basis. FMC shall make all payments within 30 days of its receipt of each bill requiring payment, except as otherwise provided in Paragraph 70. FMC shall make all payments required by this Paragraph by EFT or wire transfer made payable to "EPA Hazardous Substance Superfund" to the Mellon Bank, Pittsburgh, PA, ABA No. 043000261, Credit EPA Account No. 9108552, Attn: EPA, Region III, PO Box 9108552 and referencing the Site/Spill ID # 03-D1, the DOJ case number 90-11-2-372A, and FMC's name and address. FMC shall send notice that such payment has been made to the United States as specified in Section XXVII (Notices and Submissions) and to the Docket Clerk (3RCOO), U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, PA 19103-2029.

70. FMC may contest payment of any Future Response Costs under Paragraph 69 if FMC determines that the United States has made an accounting error or if it alleges that a cost

item that is included represents costs that are inconsistent with the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the United States pursuant to Section XXVII (Notices and Submissions). Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, FMC shall within the 30-day period pay all uncontested Future Response Costs to the United States in the manner described in Paragraph 69. Simultaneously, FMC shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the Commonwealth of Pennsylvania and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. FMC shall send to the United States, as provided in Section XXVII (Notices and Submissions), notice of payment of the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, FMC shall initiate the dispute resolution procedures in Section XX (Dispute Resolution). If the United States prevails in the dispute, within five days of the resolution of the dispute, FMC shall pay the sums due (with accrued interest) to the United States in the manner described in Paragraph 69. If FMC prevails concerning any aspect of the contested costs, it shall pay that portion of the costs (plus associated accrued interest) for which it did not prevail to the United States in the manner described in Paragraph 69; FMC shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XX (Dispute Resolution) shall be the exclusive mechanisms for resolving

disputes regarding FMC's obligation to reimburse the United States for its Future Response Costs.

71. In the event that the payments required by Paragraph 68 (a) or (b) are not made as required by this Consent Decree or the payments required by Paragraph 69 are not made within 30 days of FMC's receipt of the bill, FMC shall pay Interest on the unpaid balance. Any Interest to be paid on Past Response Costs and Interim Response Costs under this Paragraph shall begin to accrue 30 days after the effective date of this Consent Decree. Any Interest to be paid on Future Response Costs under this Paragraph shall begin to accrue on the date of the bill. Any Interest to be paid under this Paragraph shall accrue through the date of FMC's payment. Any payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to EPA by virtue of FMC's failure to make timely payments under this Section. FMC shall make all payments required by this Paragraph in the manner described in Paragraphs 68 and 69.

#### **XVIII. INDEMNIFICATION AND INSURANCE**

72. The United States does not assume any liability by entering into this agreement or by virtue of any designation of FMC as EPA's authorized representative under Section 104(e) of CERCLA. FMC shall indemnify, save and hold harmless the United States and its officials, agents, employees, contractors, subcontractors, or representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of FMC, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Consent Decree, including, but not limited to, any claims arising from any designation of FMC as EPA's

authorized representatives under Section 104(e) of CERCLA. Further, FMC agrees to pay the United States all costs it incurs including, but not limited to, attorneys fees and other expenses litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of FMC, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Consent Decree. The United States shall not be held out as a party to any contract entered into by or on behalf of FMC in carrying out activities pursuant to this Consent Decree. Neither FMC nor any such contractor shall be considered an agent of the United States. The United States shall give FMC notice of any claim for which the United States plans to seek indemnification pursuant to this Paragraph, and shall consult with FMC prior to settling such claim.

73. Except as provided in Paragraph 74 below, FMC waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States arising from or on account of any contract, agreement, or arrangement between FMC and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, FMC shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between FMC and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

74. Nothing in this Consent Decree, including but not limited to the covenant not to sue in Paragraph 106 of Section XXIII (Covenants by FMC), shall in any way affect the rights, duties,

or obligations of the parties to the two settlement agreements between FMC and the United States dated July 18, 1991, and September 15, 1992, relating to the Site. Further, nothing in this Consent Decree, including but not limited to the covenant not to sue in Paragraph 106 of Section XXIII (Covenants by FMC), shall constitute or effect a release, discharge or covenant not to sue the departments, agencies and instrumentalities of the United States that were defendants in the actions captioned FMC Corporation v. Department of Commerce, et al., No. 90-1761 (E.D. Pa.) and FMC Corporation v. National Aeronautics and Space Administration, et al., No. 90-6558 (E.D. Pa.), or their agents, predecessors or successors, or the United States, to the extent that FMC has a claim or cause of action against the United States based on the acts or omissions of the foregoing entities or the failure of the United States to fulfill or comply with its duties and obligations under the settlement agreements dated July 18, 1991, and September 15, 1992.

75. No later than 15 days before commencing any on-site Work, FMC shall secure, and shall maintain until the first anniversary of EPA's Certification of Completion of the OU-10 Remedial Action pursuant to 65.d. of Section XV (Certification of Completion) comprehensive general liability insurance with limits of \$5 million, combined single limit, and automobile liability insurance with limits of \$1,000,000, combined single limit, naming the United States as an additional insured. In addition, for the duration of this Consent Decree, FMC shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of FMC in furtherance of this Consent Decree. Prior to commencement of the Work under this Consent Decree, FMC shall provide to EPA certificates, declarations and binders of such insurance and, if requested by EPA, a copy of each insurance policy. FMC shall resubmit

such certificates, declarations and binders and, if requested by EPA, copies of policies each year on the anniversary of the effective date of this Consent Decree. Further, FMC represents that the insurance policies referenced in the certificates, declarations and binders of insurance are at all applicable times in full force and effect and at all relevant times contain all of the insurance terms and conditions required by this Consent Decree. If FMC demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to that contractor or subcontractor, FMC need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

#### **XIX. FORCE MAJEURE**

76. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of FMC, of any entity controlled by FMC, or of FMC's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite FMC's best efforts to fulfill the obligation. The requirement that FMC exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (1) as it is occurring and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent possible. "Force Majeure" does not include financial inability to complete the Work or a failure to attain the Performance Standards-Removal in a selected removal response action or failure to attain the Performance Standards-Remedial set forth in a ROD or increased costs.

77. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, FMC shall notify orally EPA's Project Coordinator or, in his or her absence, EPA's Alternate Project Coordinator or, in the event both of EPA's designated representatives are unavailable, the Director of the Hazardous Site Cleanup Division, EPA Region III, within 72 hours of when FMC first knew that the event might cause a delay. Within 10 days thereafter, FMC shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; FMC's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of FMC, such event may cause or contribute to an endangerment to public health, welfare or the environment. FMC shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude FMC from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. FMC shall be deemed to know of any circumstance of which FMC, any entity controlled by FMC, or FMC's contractors knew or should have known.

78. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If



EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event; EPA will notify FMC in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify FMC in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

79. If FMC elects to invoke the dispute resolution procedures set forth in Section XX (Dispute Resolution), it shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, FMC shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that FMC complied with the requirements of Paragraphs 76 and 77 above. If FMC carries this burden, the delay at issue shall be deemed not to be a violation by FMC of the affected obligations of this Consent Decree identified to EPA and the Court.

## **XX. DISPUTE RESOLUTION**

80. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. However, the procedures set forth in this Section shall not apply to actions by the United States to enforce obligations of FMC that have not been disputed in accordance with this Section.

81. Within 30 days of issuance of the Removal Action Memorandum for the non-time critical items of the Removal Action - Buildings, the Removal Action Memorandum for the Removal Action - Basins, ROD 4 or ROD 5, FMC may refer to dispute resolution under

Paragraph 85 the question of whether the true cost of the response action selected for the sewers in the Removal Action - Buildings, the response action selected for the Removal Action - Basins, the OU-7 remedy or the OU-10 remedy as computed in third calendar year quarter 1998 dollars pursuant to the method specified in Paragraph 13.d. exceeds the respective cost estimate thresholds of \$2.7 million third calendar year quarter 1998 dollars for the selected response action for the sewers, \$17.5 million third calendar year quarter 1998 dollars for the Removal Action - Basins, \$13.0 million third calendar year quarter 1998 dollars for OU-7 and \$7.8 million third calendar year quarter 1998 dollars for OU-10, set forth in Section VI, Paragraphs 13.b.i., 14.a.i., 15.a.i. and 16.a.i. of this Consent Decree (cost estimate thresholds). FMC shall prevail in dispute resolution on this question, and thereby be relieved of its obligation to perform the response action in question under this Consent Decree, if and only if, it is able to demonstrate that the true cost of the response action in question as computed in third calendar year quarter 1998 dollars pursuant to the method specified in Paragraph 13.d. will exceed the cost estimate threshold for such response action. Except as otherwise expressly provided in this Consent Decree, EPA's response action selection for the sewers in the Removal Action - Buildings, the Removal Action - Basins, OU-7 and OU-10 shall not otherwise be subject to dispute resolution nor shall FMC otherwise have the affirmative right to seek judicial review of the selection of the response action for the sewers in the Removal Action - Buildings, the Removal Action - Basins, OU-7 and/or OU-10, unless the response action selected by EPA does not meet the criteria set forth in Section VI concerning cost estimate thresholds and commercial, industrial, recreational and conservation use, in which case FMC shall only have those rights, if any, accorded under CERCLA.

82. Any dispute which arises under or with respect to this Consent Decree shall in the first instance be the subject of informal negotiations between the Parties. The period for informal negotiations shall not exceed 20 days from the time the dispute arises, unless it is modified by written agreement of the Parties. The dispute shall be considered to have arisen when one Party sends the other Party a written Notice of Dispute.

83. In the event that the Parties cannot resolve a dispute by informal negotiations under the preceding Paragraph, then the position advanced by EPA shall be considered binding unless, within 10 days after the conclusion of the informal negotiation period, FMC invokes the formal dispute resolution procedures of this Section by serving on the United States a written Statement of Position on the matter in dispute, including, but not limited to, any factual data, analysis or opinion supporting that position and any supporting documentation relied upon by FMC. The Statement of Position shall specify FMC's position as to whether formal dispute resolution should proceed under Paragraph 84 or Paragraph 85.

a. Within 14 days after receipt of FMC's Statement of Position, EPA will serve on FMC its Statement of Position, including, but not limited to, any factual data, analysis, or opinion supporting that position and all supporting documentation relied upon by EPA. EPA's Statement of Position shall include a statement as to whether formal dispute resolution should proceed under Paragraph 84 or 85. Within seven days after receipt of EPA's Statement of Position, FMC may submit a Reply.

b. If there is disagreement between EPA and FMC as to whether dispute resolution should proceed under Paragraph 84 or 85, the Parties shall follow the procedures set forth in the Paragraph determined by EPA to be applicable. However, if FMC ultimately appeals

to the Court to resolve the dispute, the Court shall determine which Paragraph is applicable in accordance with the standards of applicability set forth in Paragraphs 84 and 85.

84. Except as provided in Paragraph 81, formal dispute resolution for disputes pertaining to the selection or adequacy of any response action and all other disputes that are accorded review on the administrative record under applicable principles of administrative law shall be conducted pursuant to the procedures set forth in this Paragraph. For purposes of this Paragraph, the adequacy of any response action includes, without limitation: (1) the adequacy or appropriateness of plans, procedures to implement plans, or any other items requiring approval by EPA under this Consent Decree; and (2) the adequacy of the performance of response actions taken pursuant to this Consent Decree. Except as provided in Paragraph 81, nothing in this Consent Decree shall be construed to allow any dispute by FMC regarding the validity of the provisions of any Removal Action Memorandum or ROD.

a. An administrative record of the dispute shall be maintained by EPA and shall contain all Statements of Position, including supporting documentation, submitted pursuant to this Section. Where appropriate, EPA may allow submission of supplemental Statements of Position by the Parties.

b. The Director of Hazardous Site Cleanup Division, EPA Region III or his/her designee, will issue a final administrative decision resolving the dispute based on the administrative record described in Paragraph 84.a. This decision shall be binding upon FMC, subject only to the right to seek judicial review pursuant to Paragraph 84.c. and 84.d.

c. Any administrative decision made by EPA pursuant to Paragraph 84.b. shall be reviewable by this Court, provided that a motion for judicial review of the decision is filed by

FMC with the Court and served on the United States within 10 days of receipt of EPA's decision. The motion shall include a description of the matter in dispute, the efforts made by the Parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of this Consent Decree. The United States may file a response to FMC's motion.

d. In proceedings on any dispute governed by this Paragraph, FMC shall have the burden of demonstrating that the decision of the Hazardous Site Cleanup Division Director is arbitrary and capricious or otherwise not in accordance with law. Judicial review of EPA's decision shall be on the administrative record compiled pursuant to Paragraph 84.a.

85. Formal dispute resolution for disputes that neither pertain to the selection or adequacy of any response action nor are otherwise accorded review on the administrative record under applicable principles of administrative law shall be governed by this Paragraph.

a. Following receipt of FMC's Reply to EPA's Statement of Position submitted pursuant to Paragraph 83, the Director of the Hazardous Site Cleanup Division, EPA Region III or his/her designee, will issue a final decision resolving the dispute. The Division Director's decision shall be binding on FMC unless, within 10 days of receipt of the decision, FMC files with the Court and serves on the United States a motion for judicial review of the decision setting forth the matter in dispute, the efforts made by the Parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of the Consent Decree. The United States may file a response to FMC's motion.

b. Notwithstanding Paragraph I of Section I (Background) of this Consent Decree, judicial review of any dispute governed by this Paragraph shall be governed by applicable principles of law.

86. The invocation of formal dispute resolution procedures under this Section shall not extend, postpone or affect in any way any obligation of FMC under this Consent Decree unless EPA or the Court agrees otherwise or unless expressly provided in this Consent Decree.

87. Stipulated penalties with respect to any matter disputed under this Section XX (Dispute Resolution) shall continue to accrue but payment shall be stayed pending resolution of the dispute as provided in Paragraph 96. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Consent Decree. In the event that FMC does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XXI (Stipulated Penalties).

#### **XXI. STIPULATED PENALTIES**

88. FMC shall be liable for stipulated penalties in the amounts set forth in Paragraphs 89 and 90 to the United States for failure to comply with the requirements of this Consent Decree specified below, unless excused under Section XIX (Force Majeure). "Compliance" by FMC shall include completion of the activities under this Consent Decree or any work plan or other plan approved under this Consent Decree identified below in accordance with all applicable requirements of law, this Consent Decree, and any plans or other documents approved by EPA pursuant to this Consent Decree and within the specified time schedules established by and approved under this Consent Decree.

89. a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in this Paragraph 89, Subparagraph b:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$3,000	1st through 14th day
\$5,500	15th through 30th day
\$7,500	31st day and beyond

b. Failure to comply with requirements of Section VI (Implementation of Removal Actions and Remedial Actions), Section VII (Performance of the Work By FMC), Section IX (Quality Assurance, Sampling, and Data Analysis), Section XII (EPA Approval of Plans and Other Submissions), Section XVI (Emergency Response) and Paragraph 68(a) and (b) of Section XVII (Reimbursement of Response Costs).

90. a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in this Paragraph 90, Subparagraph b:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$500	1st through 14th day
\$750	15th through 30th day
\$1,500	31st day and beyond

b. Failure to submit adequate or timely reports pursuant to the requirements of Section V (General Provisions), Section XI (Reporting Requirements), Section XIV (Assurance of Ability to Complete Work) and, except as provided in Paragraph 89(b), failure to reimburse response costs of the United States under Section XVII (Reimbursement of Response Costs).

91.a. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 104 of Section XXII (Covenants Not to Sue by Plaintiff), FMC shall be liable for a stipulated penalty according to the amount set forth below:

EPA assumption of the performance of all or any portion of the Work for:

Penalty:

Removal Action - Buildings

\$298,000

Removal Action - Basins

The greater of \$336,000 or 2% of the RAP estimate in Paragraph 14.a.i. of this Consent Decree

OU-7 ROD Work

The greater of \$260,000 or 2% of the ROD estimate in Paragraph 15.a.i. of this Consent Decree

OU-10 ROD Work

The greater of \$156,000 or 2% of the ROD estimate in Paragraph 16.a.i. of this Consent Decree

Any other Work not specifically identified above

2% of EPA's costs

b. In the event that FMC is not obligated to do the work under Paragraph 13.b., 14.a., 15.a. or 16.a., and FMC does not elect to do the work under Paragraph 13.c.i., 14.b.i., 15.b.i. or 16.b.i., and as a result EPA performs work that FMC is not obligated to conduct or did not elect to conduct under this Consent Decree, FMC will not be liable for stipulated penalties under this Paragraph.

92. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (1) with respect to a deficient submission under Section XII (EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 31st day after EPA's receipt of

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such submission until the date that EPA notifies FMC of any deficiency; (2) with respect to a decision by the Director of the Hazardous Site Cleanup Division, EPA Region III, under Paragraph 84 or 85 of Section XX (Dispute Resolution), during the period, if any, beginning on the 21st day after the date that FMC's Reply to EPA's Statement of Position is received until the date that the Director issues a final decision regarding such dispute; or (3) with respect to judicial review by this Court of any dispute under Section XX (Dispute Resolution), during the period, if any, beginning on the 31st day after the Court's receipt of the final submission regarding the dispute until the date that the Court issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Decree.

93. Following EPA's determination that FMC has failed to comply with a requirement of this Consent Decree, EPA shall give FMC written notification of such failure and describe the noncompliance. EPA may send FMC a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph 92 from the date when the violation first occurred.

94. All penalties accruing under this Section shall be due and payable to the United States within 30 days of FMC's receipt from EPA of a demand for payment of the penalties, unless FMC invokes the dispute resolution procedures under Section XX (Dispute Resolution). All payments to the United States under this Section shall be paid by FMC by EFT or wire transfer made payable to "EPA Hazardous Substance Superfund" to the Mellon Bank, Pittsburgh, PA, ABA No. 043000261, Credit EPA Account No. 9108552, Attn: EPA, Region III, PO Box 9108552 and referencing the Site/Spill ID # 03-D1, the DOJ case number 90-11-2-372A, and

FMC's name and address. FMC shall send notice that such payment has been made to the United States as specified in Section XXVII (Notices and Submissions) and to the Docket Clerk (3RCOO), U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, PA 19103-2029.

95. The payment of penalties shall not alter in any way FMC's obligation to complete the performance of the Work required under this Consent Decree.

96. Penalties shall continue to accrue as provided in Paragraph 92 during any dispute resolution period, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to this Court, accrued penalties determined to be owing shall be paid to EPA within 15 days of the agreement or the receipt of EPA's decision or order;

b. If the dispute is appealed to this Court and the United States prevails in whole or in part, FMC shall pay all accrued penalties determined by the Court to be owed to EPA within 60 days of receipt of the Court's decision or order, except as provided in Subparagraph c below; or

c. If the District Court's decision is appealed by either Party, FMC shall pay all accrued penalties determined by the District Court to be owing to the United States into an interest-bearing escrow account within 60 days of receipt of the Court's decision or order. Penalties shall be paid into this account as they continue to accrue, at least every 60 days. Within 15 days of receipt of the final appellate court decision, the escrow agent shall pay the balance of the account to EPA or to FMC to the extent that they prevail.

97. a. If FMC fails to pay stipulated penalties when due, the United States may institute proceedings to collect the penalties, as well as Interest. FMC shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 94.

b. Nothing in this Consent Decree shall be construed as prohibiting, altering, or in any way limiting the ability of the United States to seek any other remedies or sanctions available by virtue of FMC's violation of this Decree or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA. Provided, however, that the United States shall not seek civil penalties pursuant to Section 122(l) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of the Consent Decree.

98. Notwithstanding any other provision of this Section, the United States may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Consent Decree.

#### **XXII. COVENANTS NOT TO SUE BY PLAINTIFF**

99. In consideration of the actions that will be performed and the payments that will be made by FMC under the terms of the Consent Decree, and except as specifically provided in Paragraphs 100, 101, and 103 of this Section, and except as specifically provided in this Paragraph 99, the United States covenants not to sue or take administrative action against FMC pursuant to Sections 106 and 107(a) of CERCLA relating to the Site. The covenant not to sue for Past Response Costs and Interim Response Costs shall take effect upon the receipt by EPA of the payments required by Paragraphs 68(a) and (b). The covenant not to sue for each Future Response Cost(s) payment shall take effect upon the receipt by EPA of each such payment

required by Paragraph 69. The covenant not to sue for each respective removal action and OU shall take effect upon Certification of Completion of that removal action or OU. The covenant not to sue for the Site shall take effect after EPA has issued the Certifications of Completion of the Removal Action - Buildings, Removal Action - Basins, OU-7 and OU-10 pursuant to Paragraph 65 (a. - d.). These covenants not to sue are conditioned upon the satisfactory performance by FMC of its obligations under this Consent Decree. These covenants not to sue extend only to FMC and do not extend to any other person.

100. United States' Pre-certification Reservations. Notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order seeking to compel FMC (a) to perform further response actions relating to the Site or (b) to reimburse the United States for additional costs of response if, prior to Certification of Completion of each respective removal action or OU by EPA pursuant to Paragraphs 65.a.-d.:

- (1) conditions at the Site, previously unknown to EPA, are discovered, or
- (2) information, previously unknown to EPA, is received, in whole or in

part,

and these previously unknown conditions or information together with any other relevant information indicates that the response actions performed or to be performed are not protective of human health or the environment.

101. United States' Post-certification Reservations. Notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an

administrative order seeking to compel FMC (a) to perform further response actions relating to the Site or (b) to reimburse the United States for additional costs of response if, subsequent to Certification of Completion of each respective removal action or OU by EPA pursuant to Paragraphs 65.a.-d.:

- (1) conditions at the Site, previously unknown to EPA, are discovered, or
- (2) information, previously unknown to EPA, is received, in whole or in

part,

and these previously unknown conditions or this information together with other relevant information indicate that the response actions performed are not protective of human health or the environment.

102. For purposes of Paragraph 100, the information and the conditions known to EPA shall include only that information and those conditions known to EPA as of the date the relevant Removal Action Memorandum or ROD was signed and set forth in that Removal Action Memorandum or ROD for the Site and/or the administrative record supporting that Removal Action Memorandum or ROD. For purposes of Paragraph 101, the information and the conditions known to EPA shall include only that information and those conditions known to EPA as of the date of Certification of Completion of the relevant response action and set forth in the relevant Removal Action Memorandum or ROD, the administrative record supporting that Removal Action Memorandum or ROD, the post-Removal Action Memorandum or post-ROD administrative record for the relevant Removal Action or ROD, or in any information received by EPA pursuant to the requirements of this Consent Decree prior to Certification of Completion of the relevant response action.

103. General reservations of rights. The covenants not to sue set forth above do not pertain to any ~~matters~~ other than those expressly specified in Paragraph 99. The United States reserves, and this Consent Decree is without prejudice to, all rights against FMC with respect to all other matters, including but not limited to, the following:

- a. claims based on a failure by FMC to meet a requirement of this Consent Decree;
- b. liability arising from the past, present, or future disposal, release, or threat of release of Waste Materials outside of the Site;
- c. liability for future disposal of Waste Material at the Site, other than as provided in the Response Action Plans, the RODs, the Work, or otherwise ordered by EPA;
- d. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- e. criminal liability;
- f. liability for violations of federal or state law which occur during or after implementation of the selected response actions; and
- g. liability, prior to Certification of Completion of a response action, for additional response actions that EPA determines are necessary to achieve the Performance Standards-Removal of that selected removal response action or that EPA determines are necessary to achieve the Performance Standards-Remedial in that ROD, but that cannot be required pursuant to Paragraph 27 (Modification of the Work).

104. Work Takeover. In the event EPA determines that FMC has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its

performance of the Work, or is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portions of the Work as EPA determines necessary. FMC may invoke the procedures set forth in Section XX (Dispute Resolution), Paragraph 85, to dispute EPA's determination that takeover of the Work is warranted under this Paragraph.

105. Notwithstanding any other provision of this Consent Decree, the United States retains all authority and reserves all rights to take any and all response actions authorized by law.

### **XXIII. COVENANTS BY FMC**

106. Covenant Not to Sue. Subject to the reservations in Paragraphs 74 and 107, FMC hereby covenants not to sue and agrees not to assert any claims or causes of action against the United States with respect to the Site and Past, Interim and Future Response Costs as defined in this Consent Decree, including, but not limited to:

- a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through CERCLA Sections 106(b)(2), 107, 111, 112, 113 or any other provision of law;
- b. any claims against the United States, including any department, agency or instrumentality of the United States under CERCLA Sections 107 or 113 related to the Site; or
- c. any claims arising out of response activities at the Site, including claims based on EPA's selection of response actions, oversight of response activities or approval of plans for such activities.

107.a. FMC reserves, and this Consent Decree is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, for

money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, any such claim shall not include a claim for any damages caused, in whole or in part, by the act or omission of any person, including any contractor, who is not a federal employee as that term is defined in 28 U.S.C. § 2671, nor shall any such claim include a claim based on EPA's selection of response actions, or the oversight or approval of FMC's plans or activities. The foregoing applies only to claims which are brought pursuant to any statute other than CERCLA and for which the waiver of sovereign immunity is found in a statute other than CERCLA.

b. FMC reserves, and this Consent Decree is without prejudice to, all defenses which FMC may have with respect to the matters reserved by the United States in Paragraph 103 and all rights which FMC may have against any Potentially Responsible Parties (PRPs) with respect to such matters.

108. Nothing in this Consent Decree shall be deemed to constitute preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

109. Waiver of Claims Against De Micromis Parties.

a. FMC agrees not to assert any claims and to waive all claims or causes of action that it may have for all matters relating to the Site, including for contribution, against any person where the person's liability to FMC with respect to the Site is based solely on having arranged for



disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if the materials contributed by such person to the Site containing hazardous substances did not exceed the greater of (i) 0.002% of the total volume of waste at the Site, or (ii) 110 gallons of liquid materials or 200 pounds of solid materials.

b. This waiver shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines that the materials contributed to the Site by such person contributed or could contribute significantly to the costs of response at the Site. This waiver also shall not apply with respect to any defense, claim, or cause of action that FMC may have against any person if such person asserts a claim or cause of action relating to the Site against FMC. Further, this waiver shall not apply to any claim or cause of action referred to in Paragraph 74 above.

#### **XXIV. EFFECT OF SETTLEMENT: CONTRIBUTION PROTECTION**

110. Except as provided in Paragraph 109 (Waiver of Claims Against De Micromis Parties), nothing in this Consent Decree shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Consent Decree. The preceding sentence shall not be construed to waive or nullify any rights that any person not a signatory to this decree may have under applicable law. Except as provided in Paragraph 109 (Waiver of Claims Against De Micromis Parties), each of the Parties expressly reserves any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto.

111. The Parties agree, and by entering this Consent Decree this Court finds, that FMC is entitled, as of the effective date of this Consent Decree, to protection from contribution actions or claims as provided by CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2), for matters addressed in this Consent Decree. Matters addressed in this Consent Decree are: Work actually performed by FMC; Past Response Costs of the United States; Interim Response Costs of the United States; work associated with all prior response actions conducted at the Site; and Future Response Costs of the United States.

112. FMC agrees that with respect to any suit or claim for contribution brought by it for matters related to this Consent Decree it will notify the United States in writing no later than 60 days prior to the initiation of such suit or claim.

113. FMC also agrees that with respect to any suit or claim for contribution brought against it for matters related to this Consent Decree it will notify the United States in writing within 10 days of service of the complaint on FMC. In addition, FMC shall notify the United States within 10 days of service or receipt of any motion for summary judgment and within 10 days of receipt of any order from a court setting a case for trial.

114. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, FMC shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing

in this Paragraph affects the enforceability of the covenants not to sue set forth in Section XXII (Covenants Not to Sue by Plaintiff).

#### **XXV. ACCESS TO INFORMATION**

115. FMC shall provide to EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Consent Decree, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. FMC shall also make available to EPA for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

116.a. FMC may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Consent Decree to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA or if EPA has notified FMC that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA, the public may be given access to such documents or information without further notice to FMC.

b. FMC may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If

FMC asserts such a privilege in lieu of providing documents, it shall provide EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the contents of the document, record, or information; and (6) the privilege asserted by FMC. However, no documents, reports or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

117. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

#### **XXVI. RETENTION OF RECORDS**

118. Unless otherwise agreed in writing by EPA at its sole discretion, until 10 years after FMC's receipt of EPA's notification pursuant to Paragraph 65.e. of Section XV (Certification of Completion), FMC shall preserve and retain all records and documents now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or liability of any person for response actions conducted and to be conducted at the Site, regardless of any corporate retention policy to the contrary. Until 10 years after FMC's receipt of EPA's notification pursuant to Paragraph 65.e. of Section XV (Certification of Completion), FMC shall also instruct its contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to the performance of the Work.

119. At the conclusion of this document retention period, FMC shall notify the United States at least 90 days prior to the destruction of any such records or documents, and, upon request by the United States, FMC shall deliver any such records or documents to EPA. FMC may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If FMC asserts such a privilege, it shall provide EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by FMC. However, no documents, reports or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

120. FMC hereby certifies individually that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information relating to its potential liability regarding the Site since notification of potential liability by the United States or the State or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Section 104(e) and 122(e) of CERCLA, 42 U.S.C. § 9604(e) and § 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

#### **XXVII. NOTICES AND SUBMISSIONS**

121. Whenever, under the terms of this Consent Decree, written notice is required to be given or a report or other document is required to be sent by one Party to another, it shall be

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directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Party in writing. All notices and submissions shall be considered effective upon receipt, unless otherwise provided. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of the Consent Decree with respect to the United States, EPA, and FMC respectively.

As to the United States:

Chief, Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Washington, D.C. 20044-7611  
Re: DJ # 90-11-2-372A  
and

Wayne R. Walters, Esq.  
Senior Assistant Regional Counsel (3RC41)  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103

As to EPA:

Bonnie Gross (3HS23)  
EPA Project Coordinator  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103

As to FMC:

William G. Cutler  
FMC Project Coordinator  
1735 Market Street, 19<sup>th</sup> Floor  
Philadelphia, Pennsylvania 19103

John F. Stillmun, Esquire  
Environmental Counsel  
FMC Corporation  
1735 Market Street, 19<sup>th</sup> Floor  
Philadelphia, Pennsylvania 19103

#### **XXVIII. EFFECTIVE AND TERMINATION DATES**

122. The effective date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court, except as otherwise provided herein. When FMC believes that the Work specified in the Consent Decree has been completed and the United States has been reimbursed by FMC for applicable expenses under Section XVII of this Consent Decree, FMC may petition the United States for agreement to terminate this Consent Decree. If the United States accepts the petition, the United States and FMC shall jointly petition the Court for termination of the Consent Decree. If the United States rejects the petition, it shall explain its reasons in writing, and the dispute resolution procedures of Section XX shall apply. Termination shall not affect the provisions of Sections XXII, XXIII and XXIV.

#### **XXIX. RETENTION OF JURISDICTION**

123. This Court retains jurisdiction over both the subject matter of this Consent Decree and FMC for the duration of the performance of the terms and provisions of this Consent Decree for the purpose of enabling either of the Parties to apply to the Court at any time for such further order, direction, and relief as may be necessary or appropriate for the construction or modification of this Consent Decree, or to effectuate or enforce compliance with its terms, or to resolve disputes in accordance with Section XX (Dispute Resolution) hereof.

**XXX. APPENDICES**

**124. The following appendices are attached to and incorporated into this Consent Decree:**

**"Appendix A" is the Site Map**

**"Appendix B" is a map of future land use adapted from the North American Realty Study**

**"Appendix C" is UAO III-90-12-DC, together with the Second Modification to UAO III-90-12-DC**

**"Appendix D" is UAO III-91-48-DC**

**XXXI. COMMUNITY RELATIONS**

**125. FMC shall propose to EPA its participation in the community relations plan to be developed by EPA. EPA will determine the appropriate role for FMC under the Plan. FMC shall also cooperate with EPA in providing information regarding the Work to the public. As requested by EPA, FMC shall participate in the preparation of such information for dissemination to the public and in public meetings which may be held or sponsored by EPA to explain activities at or relating to the Site.**

**XXXII. MODIFICATION**

**126. Schedules specified in this Consent Decree for completion of the Work may be modified by agreement of EPA and FMC. All such modifications shall be made in writing.**

**127. Except as provided in Paragraph 27 (Modification of the Work), no material modifications shall be made to the provisions of this Consent Decree without written notification**



to and written approval of the United States, FMC, and the Court. Modifications to any of the work plans approved by EPA under this Consent Decree that do not materially alter the requirements of those documents may be made by written agreement between EPA and FMC.

128. Nothing in this Decree shall be deemed to alter the Court's power to enforce, supervise or approve modifications to this Consent Decree.

#### **XXXIII. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT**

129. This Consent Decree shall be lodged with the Court for a period of not less than 30 days for public notice and comment in accordance with Section 122(d)(2) of CERCLA, 42 U.S.C. § 9622(d)(2), and 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. FMC consents to the entry of this Consent Decree without further notice.

130. If for any reason the Court should decline to approve this Consent Decree in the form presented, this agreement is voidable at the sole discretion of either Party and the terms of the agreement may not be used as evidence in any litigation between the Parties.

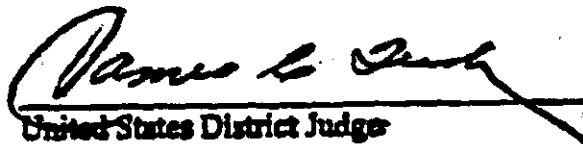
#### **XXXIV. SIGNATORIES/SERVICE**


131. Each undersigned representative of FMC and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such Party to this document.

132. FMC hereby agrees not to oppose entry of this Consent Decree by this Court or to challenge any provision of this Consent Decree unless the United States has notified FMC in writing that it no longer supports entry of the Consent Decree.

133. FMC shall identify, on the attached signature page, the name, address and telephone number of an agent who is authorized to accept service of process by mail on behalf of FMC with respect to all matters arising under or relating to this Consent Decree. FMC hereby agrees to accept service in that manner and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including, but not limited to, service of a summons.

SO ORDERED THIS 21<sup>st</sup> DAY OF Oct., 1999

  
United States District Judge

A TRUE COPY TESTED  
MORGAN E. SCOTT, JR., CLERK  
BY  DEPUTY CLERK

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13.2 As provided by the Order, EPA expressly reserves its right to disapprove of work performed by the Respondent and reserves its right to request or require that the Respondent perform response actions in addition to those required by this Order. In the event that the Respondent declines to perform such additional actions, EPA reserves the right to undertake such actions and seek reimbursement of the costs incurred. EPA retains the authority to take enforcement actions, including actions for monetary penalties, for any violation of law, regulation, or of this Order. Such enforcement actions may include actions for violations of this Order pursuant to Sections 106(b)(1) and 113(b) of CERCLA, 42 U.S.C. §§ 9606(b)(1) and 9613(b). Failure to comply with this Order or any portion hereof without sufficient cause also may subject Respondent to civil penalties of up to \$25,000 a day and/or punitive damages in an amount up to three times the amount of any costs incurred by the United States as a result of such failure, pursuant to Sections 106(b) and 107(c) of CERCLA, 42 U.S.C. §§ 9606(b) and 9607(c). In addition, EPA reserves the right to undertake removal and/or remedial actions at any time that such actions are appropriate under the NCP and to seek reimbursement for any costs incurred.

#### **XIV. NOTIFICATION OF DELAY**

14.1 The Respondent, through its Project Coordinator, shall notify EPA of any delay or anticipated delay in achieving compliance with any requirement of this Order. Such notification shall be made verbally as soon as possible, but not later than two (2) business days after Respondent becomes aware of any such delay or anticipated delay and in writing no later than seven (7) days after the Respondent becomes aware of such delay or anticipated delay. The written notice shall describe fully the nature of the delay, the reasons the delay is beyond the Respondent's control, if appropriate, the actions that have and/or will be taken to mitigate, prevent and/or minimize further delay, the anticipated length of the delay and the timetable according to which the actions to mitigate, prevent and/or minimize the delay will be taken. The Respondent shall adopt all reasonable measures to avoid or minimize any such delay.

#### **XV. OTHER CLAIMS**

15.1 Nothing in this Order shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership, or corporation not

bound by this Order for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken from the Site.

15.2 This Order does not constitute any decision on preauthorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. Section 9611(a)(2).

#### XVI. OTHER APPLICABLE LAWS

16.1 All actions required to be taken pursuant to this Order shall be undertaken in accordance with the requirements of all applicable local, state, and Federal laws and regulations, as required by the NCP.

16.2 Compliance with this Order shall not relieve Respondent of the duty to comply with any Federal, state or local law except as expressly provided in CERCLA, the NCP, or this Order.

#### XVII. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

17.1 The effective date of this Order shall be the date on which it is received by the Respondent.

17.2 Any reports, plans, specifications, schedules, or other submissions required by this Order are, upon approval by EPA, incorporated into this Order. Any non-compliance with such EPA approved reports, plans, specifications, schedules, or other submissions shall be considered non-compliance with the requirements of this Order.

17.3 No informal advice, guidance, suggestions or comments by EPA regarding reports, plans, specifications, schedules, or other submissions by the Respondent or the requirements of this Order will be construed as relieving the Respondent of its obligation to obtain formal approval when required by this Order.

#### XVIII. LIABILITY OF THE UNITED STATES GOVERNMENT

18.1 Neither the United States Government nor any agency thereof shall be liable for any injuries or damages to persons or

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property resulting from acts or omissions of Respondent, or of its employees, agents, servants, receivers, successors, or assigns, or of any persons, including, but not limited to firms, corporations, subsidiaries, contractors, or consultants, in carrying out activities pursuant to this Order, nor shall the United States Government or any agency thereof be held as a party to any contract entered into by Respondent in carrying out activities pursuant to this Order.

#### **XIX. CERTIFICATION OF COMPLIANCE**

19.1 Any notice, report, certification, data presentation, or other document submitted by Respondent under or pursuant to this Order, which discusses, describes, demonstrates, or supports any finding or makes any representation concerning Respondent's compliance or non-compliance with any requirement(s) of this Order shall be certified by a corporate officer of the Respondent.

19.2 The certification required by paragraph 19.1, above shall be in the following form:

"I certify that the information contained in or accompanying this (specify type of submission) is true, accurate and complete."

Signature: \_\_\_\_\_  
Name(print): \_\_\_\_\_  
Title: \_\_\_\_\_

#### **XX. OPPORTUNITY TO CONFER WITH EPA AND NOTICE OF INTENTION TO COMPLY**

20.1 Not later than three (3) business days after the effective date of this Order, FMC may confer with EPA to discuss this Order. Such conference is not an adversarial hearing or part of a proceeding to challenge this Order, and no official stenographic record of such conference shall be kept. Any request for a conference shall be made to the EPA Project Coordinator identified in Section 9.1 above.

20.2 Within five (5) business days from the effective date of this Order, Respondent shall notify the EPA Project Coordinator in writing whether or not the Respondent intends to comply with

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the terms of this Order. A failure to provide such notice shall be deemed to be a decision not to comply with the terms of this Order, and a violation of this Order.

## XXII. ADMINISTRATIVE RECORD

22.1 The Administrative Record of this Order is in the custody of the EPA Project Coordinator and said record will be made available for inspection upon reasonable request.

## XXIII. TERMINATION AND SATISFACTION

23.1 The Respondent's obligations to EPA under this Order shall terminate and be deemed satisfied upon the Respondent's receipt of written notice from EPA that the Respondent has demonstrated, to the satisfaction of EPA, that all the terms of this Order have been completed.

BY:

*Edwin B. Erickson*  
Edwin B. Erickson  
Regional Administrator  
Region III  
U.S. Environmental Protection Agency

DATE:

FEB 2 1990

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**LOCATION OF AVTEX  
MONITORING WELLS**  
AVTEX FIBERS, INC.





## **EXHIBIT "C"**

### **Scope of Work Waste Water Treatment Plant Avtex Fibers Site, Front Royal, Warren County, Virginia**

#### **Background:**

The Avtex Fibers Front Royal Plant shut down its operations on November 10, 1989. On that day, all operations at the waste water treatment plant (WWTP) and manufacturing facility ceased. The original plant design used an activated sludge treatment system. This was appropriate during the time the plant operated due to the presence of waste streams that contributed to a high biological oxygen demand (BOD) that sustained the activated sludge process. Upon plant shutdown, all process waste streams ceased. Therefore no further high BOD waste was generated. Accordingly, the plant went septic within days. No alternate on site treatment system for wastewater was available. To further complicate matters, a pre-existing PCB contamination problem existed within the infrastructure of the facility.

The Avtex Fibers site contains over 120 acres of industrial waste water surface impoundments (SI). These SIs are linked together to allow gravity flow towards the emergency lagoon. During normal plant operations this flow was periodically pumped into the WWTP for treatment prior to discharge. Upon identifying the PCB contamination problem on-site, the storm water outfall #003 was blocked in order to prevent PCB discharge. This flow was directed into the emergency lagoon. These lagoons had already contained process wastes and are high in sulfates, zinc, cadmium, chromium, lead, carbon disulfide, oil and grease and in certain circumstances high BOD as a result of the presence of cellulose. (reference Exhibit "D")

EPA and the Commonwealth of Virginia have determined that an uncontrolled or untreated discharge of these waste waters presents a serious threat to the public health or the environment.

#### **Actions taken by EPA to date:**

In order to prevent any discharge into the Shenandoah River, EPA has initiated and continues to maintain a pumping operation where collected water and normal basin drainage is pumped back to the SIs that have storage capacity. As of January 2, 1990, stored water has essentially reached the storage capacity of the SIs. The situation has reached the critical stage. EPA initiated a sampling and treatability effort immediately upon closure of the facility. While this effort is not yet complete, enough information exists

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to allow on-site treatment to continue. EPA's short term goal is to treat and discharge water at a rate sufficient to maintain freeboard and storage capacity in the SIs. With the assistance of the Virginia Water Control Board (VWCB), EPA is presently treating water on the site.

The results of EPA's evaluation to date, indicate that a combination of physical/chemical treatment is appropriate. The goal of the treatment system will be to reduce total suspended solids (TSS), adjust pH, reduce zinc, and other heavy metal concentrations and remove PCBs. The Commonwealth of Virginia has developed discharge criteria (ARARS) for this treatment system. (See Exhibit "D") EPA has determined that the existing operation treatment system has complied and can comply with these standards.

In compliance with this Order the Respondent shall:

1. Meet with EPA on-site within five (5) days of the effective date of this Order to coordinate an orderly transition from EPA operation of the existing wastewater treat plant to FMC operation;

2. Commence operation of wastewater treatment at the Avtex Site within twenty-one days (21) of the on-site meeting with EPA, with the goal of establishing and maintaining a freeboard level of two (2) feet in Sulfate Basins 1-4, 4E and emergency lagoon, where achievable;

3. Complete a full scale treatability study to determine the most effective treatment method for wastewaters in Sulfate Basins 1-4, 4E and emergency lagoon;

4. Within fourteen (14) days of the meeting described in paragraph 1 above, submit a detailed Work Plan that will evaluate the following conceptual design criteria for the treatment of wastewaters from Sulfate Basins 1-4, 4E and emergency lagoon in the WWTW which includes at a minimum:

- a. A WWTW design that will attain the goal of two (2) feet of freeboard in the on-site surface impoundments, where achievable;
- b. Use of existing WWTW headworks for pH adjustment;
- c. Addition of an alkaline material for pH adjustment and optimum flocculation;
- d. If appropriate, use the on-site primary clarifier for initial settling;
- e. If appropriate, use WWTW units to meet design requirements for residence time and settling;

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- f. If appropriate, perform final clarification for TSS reduction;
  - g. If appropriate, perform sand filtration and polishing with activated carbon to meet organic contaminant discharge criteria;
  - h. A schedule for the expeditious implementation of the work plan.
5. Implement the EPA approved wastewater treatment system as set forth in Section VIII of this Order;
6. Develop and implement a site specific Health and Safety plan that is consistent with EPA's existing Site Health and Safety Plan;
7. Treat effluent to the greatest extent practicable to standards set forth in the attached APARs, using detection limits established by Best Developed Available Technology (BDAT) and EPA-approved analytical procedures. (see Exhibit "D").

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# EXHIBIT D

Virginia Water Quality criteria exist for several of the OCF parameters. They are phenol, cyanide, and the metals. The mass equation will be employed and limitations imposed as necessary for these parameters.

$$D \text{ max Effluent Limit} = [(155.17 + Q_e)(\text{Criteria}) - 155.17 (\text{Background})] \div Q_e$$

Where  $7Q_{10} = 155.17 \text{ MGD}$

From previous analysis of Storet data for the receiving stream, the following background concentrations will be employed; lead 5.5 ppb and zinc 22 ppb. All other parameters have not been measured in the effluent or are generally below the Minimum Detection Level (MDL). The maximum  $Q_e$  of 7.5 MGD will be employed for this initial analysis.

$$\begin{aligned} D \text{ Max Effluent Limit} &= [162.67(\text{Criteria}) - 155.117 (\text{Background})] \div 7.5 \\ &= 21.689(C) - 20.689 (B) \\ \text{Lead} &= 21.689(5.9) - 20.689(5.5) = 14.17 \text{ ppb} < \text{BAT} \\ \text{Phenol} &= 21.689(1) - \text{Zero} = 21.69 \text{ ppb} < \text{BAT, DM} \\ \text{Cyanide} &= 21.689(5.2) - \text{Zero} = 112.78 \text{ ppb} < \text{BAT} \\ \text{Chromium} &= 21.689(312) - \text{Zero} = 6,766.97 \text{ ppb} > 1110/2770 (\text{BAT}) \\ \text{Copper} &= 21.689(18.2) - \text{Zero} = 394.74 \text{ ppb} < \text{BAT} \\ \text{Nickel} &= 21.689(139.7) - \text{Zero} = 3,029.9 \text{ ppb} > 1,690, < \text{BAT MAX} \\ * \text{Arsenic} &= 21.689(190) - \text{Zero} = 4,120.9 \text{ ppb Not OCPSF Guideline Parameter} \\ * \text{Cadmium} &= 21.689(1.7) - \text{Zero} = 36.8 \text{ ppb Not OCPSF Guideline Parameter} \end{aligned}$$

\*Addressed by Superfund R.O.D., but not detected in effluent samples (Cd) or present in levels of WQS concern (As).

Example: At a discharge level of 1.0 MGD the equation becomes:  
(for those < BAT)

$$\begin{aligned} D \text{ Max. Effluent Limit} &= [156.17(\text{Crit.}) - 155.17 (\text{Back})] \\ \text{Lead} &= 156.17(5.9) - 155.17(5.5) = 67.97 \text{ ppb} < \text{BAT} \\ \text{Phenol} &= 156.17(1) - \text{Zero} = 156.17 \text{ ppb} > 15/26 (\text{BAT}) \\ \text{Cyanide} &= 156.17(5.2) = 812.08 \text{ ppb} > 420 < \text{MA} \\ \text{Copper} &= 156.17(18.2) = 2,842.29 \text{ ppb} > 1450 < \text{DM} \\ \text{Arsenic} &= 156.17(190) = 29,672.39 \text{ ppb, N/A} \\ \text{Cadmium} &= 156.17(1.7) = 265.49 \text{ ppb, N/A} \end{aligned}$$

Of those parameters limited by the OCPSF guidelines which have VWQS, only a few have been detected in the Avtex wastewater (raw, lagoon, or effluent). Of regulatory concern are zinc, copper, cyanide, lead, and phenol. As noted before, arsenic and cadmium were addressed by the record of decision, but only cadmium may be of concern as a result of the low instream chronic criteria (even though SWCB analyses have never detected its presence in the effluent.

AR200148

Based on the preceding analysis, additional effluent limitations will be added to the limitations matrix. Further, effluent limitation pages for the remaining OCPSF parameters have been developed. These pages will contain effluent limitations expressed in terms of concentration and will apply to any level of discharge up to 7.5 MGD. The monitoring frequency of once/year will apply to discharge volumes equal to, or less than 7.5 MGD.

Because the discharge from this site will ultimately be the result of a remedial action, the staff recommends that the remediation goals concerning ground water quality also be included in the proposed, or any subsequent order issued to FMC or other RP.

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning with the initiation of discharge and lasting until the completion of the remedial activities, the operator is authorized to discharge from outfall(s) serial number(s) 004 - outfall of final unit of wastewater treatment plant, at a maximum discharge volume of 0.288 MGD.

Such discharges shall be limited and monitored at outfall 004 as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Kg/Day		Other Units (Specify)		Measurement Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Flow-M <sup>3</sup> /Day (MGD)	NA	NA	NL	0.288	1/Day	Measured
BOD <sub>5</sub>	32.70	49.05	NL	NL	1/Day	Grab
Total Suspended Solids	32.70	49.05	NL	NL	1/Day	Grab
Total Polychlorinated Biphenyls	NA	NA	NA	Non-Detect*	1/Day	Grab
Zinc	3.62	7.41	3.33	6.80	1/Day	Grab
Copper	1.581	3.684	1.450	3.380	1/Month	Grab
Lead	NA	0.185	NA	0.221	1/Month	Grab
Phenol	0.0163	0.028	0.015	0.026	1/Month	Grab
Cadmium	NA	1.000	NA	0.918	1/Month	Grab
OCPSF Toxic Pollutants	NA	NA	See pages 8-10 for actual effluent limitations		1/Year	Grab
Cyanide	0.458	1.308	0.420	1.200	1/Month	Grab

2. The discharge shall have a pH value between 6.5 and 9.5 at all times and shall be monitored 1/Day by grab sample.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.

\* The Minimum Detection Limitation (MDL) for each PCB species is as follows:

0.05 ug/l for 1016 and 1242; 0.1 ug/l for 1221, 1232, 1248 and 1254; 0.20 ug/l for 1260.

AR200150

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning with the initiation of discharge and lasting until the completion of the remedial activities, the operator is authorized to discharge from outfall(s) serial number(s) 004 - outfall of final unit of wastewater treatment plant, at a maximum discharge volume of 0.576 MGD.

Such discharges shall be limited and monitored at outfall 004 as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Kg/Day		Other Units (Specify)		Measurement Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Flow-M <sup>3</sup> /Day (MGD)	NA	NA	NL	0.576	1/Day	Measured
BOD <sub>5</sub>	65.40	98.11	NL	NL	1/Day	Grab
Total Suspended Solids	65.40	98.11	NL	NL	1/Day	Grab
Total Polychlorinated Biphenyls	NA	NA	NA	Non-Detect*	1/Day	Grab
Zinc	NA	14.79	NA	6.78	1/Day	Grab
Copper	3.161	7.369	1.450	3.38	1/Month	Grab
Lead	NA	0.246	NA	0.113	1/Month	Grab
Phenol	0.327	0.567	0.015	0.026	1/Month	Grab
Cadmium	NA	1.003	NA	0.460	1/Month	Grab
OCPSF Toxic Pollutants	NA	NA	See pages 8-10 for actual effluent limitations		1/Year	Grab
Cyanide	0.916	2.616	0.420	1.200	1/Month	Grab

2. The discharge shall have a pH value between 6.5 and 9.5 at all times and shall be monitored once per day by grab sample.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.

\* The Minimum Detection Limitation (MDL) for each PCB species is as follows:

0.05 ug/l for 1016 and 1242; 0.1 ug/l for 1221, 1232, 1248 and 1254 and 0.20 ug/l for 1260.

AR200151

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning with the initiation of discharge and lasting until the completion of the remedial activities, the operator is authorized to discharge from outfall(s) serial number(s) 004 - outfall of final unit of wastewater treatment plant, at a maximum discharge volume of 0.864 MGD.

Such discharges shall be limited and monitored at outfall 004 as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>Kg/Day</u>		<u>Other Units (Specify)</u>		<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Monthly Avg.</u>	<u>Daily Max.</u>	<u>Monthly Avg.</u>	<u>Daily Max.</u>		
Flow-M <sup>3</sup> /Day (MGD)	NA	NA	ML	0.864	1/Day	Measured
BOD <sub>5</sub>	98.11	147.16	ML	ML	1/Day	Grab
Total Suspended Solids	98.11	147.16	ML	ML	1/Day	Grab
Total Polychlorinated Biphenyls	NA	NA	NA	Non-Detect*	1/Day	Grab
Zinc	NA	14.84	NA	4.54	1/Day	Grab
Copper	4.743	10.752	1.450	3.287	1/Month	Grab
Lead	NA	0.255	NA	0.078	1/Month	Grab
Phenol	0.049	0.085	0.015	0.026	1/Month	Grab
Cadmium	NA	1.004	NA	0.307	1/Month	Grab
OCPSF Toxic Pollutants	NA	NA	See pages 8-10 for actual effluent limitations		1/Year	Grab
Cyanide	1.374	3.071	0.420	0.939	1/Month	Grab

2. The discharge shall have a pH value between 6.5 and 9.5 at all times and shall be monitored once per day by grab sample.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The Minimum Detection Limitation (MDL) for each PCB species is as follows:  
 0.05 ug/l for 1016 and 1242; 0.1 ug/l for 1221, 1232, 1248 and 1254 and 0.20 ug/l for 1260.

\* AR200152



**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning with the initiation of discharge and lasting until the completion of the remedial activities, the operator is authorized to discharge from outfall(s) serial number(s) 004 - outfall of final unit of wastewater treatment plant, at a maximum discharge volume of 1.152 MGD.

Such discharges shall be limited and monitored at outfall 004 as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mg/Day		Other Units (Specify)		Measurement Frequency	Sample Type
	Monthly Avg.	Daily Max.	Mg/l	Monthly Avg. Daily Max.		
Flow-M <sup>3</sup> /Day (MGD)	NA	NA	NL	1.152	1/Day	Measured
BOD <sub>5</sub>	130.81	196.21	NL	NL	1/Day	Grab
Total Suspended Solids	130.81	196.21	NL	NL	1/Day	Grab
Total Polychlorinated Biphenyls	NA	NA	NA	Non-Detect*	1/Day	Grab
Zinc	NA	14.87	NA	3.41	1/Day	Grab
Copper	6.322	10.768	1.450	2.469	1/Month	Grab
Lead	NA	0.262	NA	0.060	1/Month	Grab
Phenol	0.065	0.113	0.015	0.026	1/Month	Grab
Cadmium	NA	1.006	NA	0.231	1/Month	Grab
OCPSF Toxic Pollutants	NA	NA	See pages 8-10 for actual effluent limitations		1/Year	Grab
Cyanide	1.831	3.078	0.420	0.706	1/Month	Grab

2. The discharge shall have a pH value between 6.5 and 9.5 at all times and shall be monitored once per day by grab sample.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The Minimum Detection Limitation (MDL) for each PCB species is as follows:  
0.05 ug/l for 1016 and 1242; 0.1 ug/l for 1221, 1232, 1248 and 1254 and 0.20 ug/l for 1260.

AR200153

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning with the initiation of discharge and lasting until the completion of the remedial activities, the operator is authorized to discharge from outfall(s) serial number(s) 004 - outfall of final unit of wastewater treatment plant, at a maximum discharge volume of 2.00 MGD.

Such discharges shall be limited and monitored at outfall 004 as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Kg/Day		Other Units (Specify)		Measurement Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Flow-M <sup>3</sup> /Day (MGD)	NA	NA	ML	2.00	1/Day	Measured
BOD <sub>5</sub>	227.10	340.65	ML	ML	1/Day	Grab
Total Suspended Solids	227.10	340.65	ML	ML	1/Day	Grab
Total Polychlorinated Biphenyls	NA	NA	NA	Non-Detect*	1/Day	Grab
Zinc	NA	15.04	NA	1.990	1/Day	Grab
Copper	NA	10.825	NA	1.430	1/Month	Grab
Lead	NA	0.280	NA	0.037	1/Month	Grab
Phenol	0.114	0.197	0.015	0.026	1/Month	Grab
Cadmium	NA	1.014	NA	0.134	1/Month	Grab
OCBSP Toxic Pollutants	NA	NA	See pages 8-10 for actual effluent limitations		1/Year	Grab
Cyanide	NA	3.096	NA	0.409	1/Month	Grab

2. The discharge shall have a pH value between 6.5 and 9.5 at all times and shall be monitored once per day by grab sample.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The Minimum Detection Limitation (MDL) for each PCB species is as follows:

0.05 ug/l for 1016 and 1242; 0.1 ug/l for 1221, 1232, 1248 and 1254 and 0.20 ug/l for 1260.

AR200154

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning with the initiation of discharge and lasting until the completion of the remedial activities, the operator is authorized to discharge from outfall(s) serial number(s) 004 - outfall of final unit of wastewater treatment plant, at a maximum discharge volume of 5.00 MGD.

Such discharges shall be limited and monitored at outfall 004 as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Kg/Day		Other Units (Specify)		Measurement Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Flow-M <sup>3</sup> /Day (MGD)	NA	NA	NL	5.00	1/Day	Measured
BOD <sub>5</sub>	567.75	851.63	NL	NL	1/Day	Grab
Total Suspended Solids	567.75	851.63	NL	NL	1/Day	Grab
Total Polychlorinated Biphenyls	NA	NA	NA	Non-Detect*	1/Day	Grab
Zinc	NA	15.78	NA	0.823	1/Day	Grab
Copper	NA	11.03	NA	0.583	1/Month	Grab
Lead	NA	0.346	NA	0.018	1/Month	Grab
Phenol	0.284	0.492	0.015	0.026	1/Month	Grab
Cadmium	NA	1.022	NA	0.054	1/Month	Grab
OCSPF Toxic Pollutants	NA	NA	See pages 8-10 for actual effluent limitations		1/Year	Grab
Cyanide	NA	3.160	NA	0.167	1/Month	Grab

2. The discharge shall have a pH value between 6.5 and 9.5 at all times and shall be monitored once per day by grab sample.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The Minimum Detection Limitation (MDL) for each PCB species is as follows:

0.05 ug/l for 1016 and 1242; 0.1 ug/l for 1221, 1232, 1248 and 1254 and 0.20 ug/l for 1260.

AR200155

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the initiation of discharge and lasting until the completion of the remedial activities, the operator is authorized to discharge from outfall(s) serial number(s) 004 - outfall of final unit of wastewater treatment plant, at a maximum discharge volume of 7.50 MGD. Such discharges shall be limited and monitored at outfall 004 as specified below:

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
		Other Units (Specify)			
		Monthly Avg. Daily Max.		Measurement Frequency	
		Kg/Day		Sample Type	
Flow-M <sup>3</sup> /Day (MGD)	NA	NA	NT	7.50	1/Day Measured
BOD	851.62	1,277.44	NT	NT	1/Day Grab
Total Suspended Solids	851.62	1,277.44	NT	NT	1/Day Grab
Total Polychlorinated Biphenyls	NA	NA	NA	Non-Detect	1/Day Grab
Zinc	NA	16.01	NA	0.564	1/Day Grab
Copper	NA	11.18	NA	0.394	1/Day Grab
Lead	NA	0.397	NA	0.014	1/Day Grab
Phenol	NA	0.426	NA	0.015	1/Day Grab
Cadmium	NA	1.050	NA	0.037	1/Month Grab
Other Toxic Pollutants	NA	NA	See pages 8-10 for actual effluent limitations	1/Year	Grab
Cyanide	NA	3.207	NA	0.113	1/Month Grab

2. The discharge shall have a pH value between 6.5 and 9.5 at all times and shall be monitored once per day by grab sample.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The Minimum Detection Limitation (MDL) for each PCB species is as follows:  
0.05 ug/l for 1016 and 1242; 0.1 ug/l for 1221, 1232, 1248 and 1254 and 0.20 ug/l for 1260.

## PART I

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the initiation of discharge and lasting until the completion of the remedial activities, the operator is authorized to discharge from outfall(s) serial number(s) 004 - outfall of final unit of wastewater treatment plant, at a maximum discharge volume of 7.50 MGD.

Such discharges shall be limited and monitored at outfall 004 and the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Kg/Day		Other Units (Specify)		Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Acenaphthene	NA	NA	22	59	1/year	Grab
Acrylonitrile	NA	NA	96	242	1/year	Grab
Benzene	NA	NA	37	136	1/year	Grab
Carbon Tetrachloride	NA	NA	18	38	1/year	Grab
Chlorobenzene	NA	NA	15	28	1/year	Grab
1,2,4 - Trichlorobenzene	NA	NA	68	140	1/year	Grab
Hexachlorobenzene	NA	NA	15	28	1/year	Grab
1,2 - Dichloroethane	NA	NA	68	211	1/year	Grab
1,1,1 - Trichloroethane	NA	NA	21	54	1/year	Grab
Hexachloroethane	NA	NA	21	54	1/year	Grab
1,1 - Dichloroethane	NA	NA	22	59	1/year	Grab
1,1,2 - Trichloroethane	NA	NA	21	54	1/year	Grab
Chloroethane	NA	NA	104	268	1/year	Grab
Chloroform	NA	NA	21	46	1/year	Grab
2 Chlorophenol	NA	NA	31	98	1/year	Grab
1,2 - Dichlorobenzene	NA	NA	77	163	1/year	Grab
1,3 - Dichlorobenzene	NA	NA	31	44	1/year	Grab
1,4 - Dichlorobenzene	NA	NA	15	28	1/year	Grab
1,1 - Dichloroethylene	NA	NA	16	25	1/year	Grab
1,2 - Transdichloroethylene	NA	NA	21	54	1/year	Grab
2,4 - Dichlorophenol	NA	NA	39	112	1/year	Grab
1,2 - Dichloropropene	NA	NA	153	230	1/year	Grab

2. The discharge shall have a pH value between 6.5 and 9.5 at all times and shall be monitored once per day by grab sample.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.

AR200157

## PART I

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the initiation of discharge and lasting until the completion of the remedial activities, the operator is authorized to discharge from outfall(s) serial number(s) 004 - outfall of final unit of wastewater treatment plant, at a maximum discharge volume of 7.50 MGD.

Such discharges shall be limited and monitored at outfall 004 and the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Kg/Day		Other Units (Specify)		Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Diethyl Fthalate	NA	NA	81	203	1/year	Grab
Dimethyl Fthalate	NA	NA	19	47	1/year	Grab
Benzo (a) Anthracene	NA	NA	22	59	1/year	Grab
Benzo (a) Pyrene	NA	NA	23	61	1/year	Grab
3,4 - Benzoefluoranthene	NA	NA	23	61	1/year	Grab
Benzo (k) Fluoranthene	NA	NA	22	59	1/year	Grab
Chrysene	NA	NA	22	59	1/year	Grab
Acenaphthylene	NA	NA	22	59	1/year	Grab
Anthracene	NA	NA	22	59	1/year	Grab
Fluorene	NA	NA	22	59	1/year	Grab
Phenanthrene	NA	NA	22	59	1/year	Grab
Pyrene	NA	NA	25	67	1/year	Grab
Tetrachloroethylene	NA	NA	22	56	1/year	Grab
Toluene	NA	NA	26	80	1/year	Grab
Trichloroethylene	NA	NA	21	54	1/year	Grab
Vinyl Chloride	NA	NA	104	268	1/year	Grab
Total Chromium	NA	NA	1,110	2,770	1/year	Grab
Total Nickel	NA	NA	1,690	3,980	1/year	Grab

2. The discharge shall have a pH value between 6.5 and 9.5 at all times and shall be monitored once per day by grab sample.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.

AR200158

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III**

**IN THE MATTER OF:**

**Avtex Fibers Site**

**FMC Corporation**

**RESPONDENT**

**Docket No. III-90-12-DC**

**Proceeding Under Section 106(a)  
of the Comprehensive  
Environmental Response,  
Compensation and Liability  
Act of 1980 (42 U.S.C. §9606(a))  
as amended by the Superfund  
Amendments and Reauthorization  
Act of 1986, Pub. L. No. 99-499,  
100 Stat. 1613 (1986)**

**MODIFICATION NO. 1 TO THE  
ADMINISTRATIVE ORDER FOR REMOVAL  
RESPONSE ACTIVITIES DATED FEBRUARY 2, 1990**

Having determined the necessity for implementation of response activities at the Avtex Fibers Superfund Site in Front Royal, Virginia, the United States Environmental Protection Agency ("EPA") issued an Administrative Order corresponding to EPA Docket No. III-90-12-DC to the above-captioned party on February 2, 1990 ("Administrative Order"). Pursuant to Section 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. § 9606(a), EPA hereby modifies the Administrative Order as follows:

**AR200159**

## I. Modification

A. Exhibit C of the Administrative Order is hereby MODIFIED to add provisions 5.a. and 5.b.

5.a. A variance from the minimum two-foot freeboard design specification, required by Section 4.a and implemented pursuant to Section 5, may be necessary during the Remedial Investigation field work to support proper sampling of the sulfate basins. Prior to sampling Respondent shall submit a workplan which contains proposed freeboard level(s) to EPA for approval as set forth in Sections 8.4 and 8.5. Upon approval by EPA of the workplan and the freeboard level(s) a variance from the minimum freeboard level will be granted for sampling of sulfate basins Nos. 1, 2, 3, 4, and 4 E in accordance with the Final Work Plan dated February 1993. The minimum two-foot freeboard requirement may, however, only be exceeded in one basin at a time.

5.b. The following information shall be submitted thirty (30) days prior to decreasing the freeboard in the sulfate basins:

- (i) The amount of freeboard expected to be maintained in the basin(s) during sampling activities and an explanation of how the freeboard was determined.
- (ii) Using the existing rainfall data, determine how much the level in the sulfate basins will be raised in the event of seasonal rainfall.
- (iii) Identify the source of the water to be added to the sulfate basins.
- (iv) A contingency plan which shall address controls to be implemented to prevent basin overflow and release to the Shenandoah River while the minimum two-foot freeboard is not being maintained. The plan shall also include provisions for notification of appropriate federal, state and local agencies and countermeasures to be implemented in the event of a release.

B. The sampling shall be completed as expeditiously as possible and Respondent shall, to the maximum extent practicable, conduct the sampling activities in a manner which will prevent releases to the river.

C. Upon completion of the sampling, the variance granted in 5.a above shall terminate and the two-foot freeboard requirement in Exhibit C.5 is reinstated.

D. Paragraph 9.1 of the Administrative Order is MODIFIED to identify a new EPA Project Coordinator. The Project Coordinator

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for EPA is:

Bonnie Guy Gross, Remedial Project Manager  
U.S. Environmental Protection Agency  
—VA/WV Section (3HW41)  
841 Chestnut Building  
Philadelphia, PA 19107  
(215) 597-0491

**II. LIMITATION ON MODIFICATION**

Except as otherwise stated herein, nothing in this Modification No. 1 shall alter or otherwise affect any term or condition set forth in the Administrative Order.

**III. EFFECTIVE DATE**

This Modification No. 1 is effective on the date that it is signed by the Acting Regional Administrator, EPA Region III.

*for* Stanley L. Laskowski  
Acting Regional Administrator  
U. S. Environmental Protection Agency  
Region III

8-2-93  
Date

AR200161

**BEFORE THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION III**

**IN THE MATTER OF:**

**Avtex Fibers Site**

**FMC Corporation.**

**Respondent**

**Proceeding Under Section 106(a)  
of the Comprehensive Environmental  
Response, Compensation, and  
Liability Act of 1980, as amended,  
42 U.S.C. § 9606(a)**

**Docket No. III-90-12-DC**

I hereby certify that the  
within is a true and correct copy  
of the original Administrative  
Order filed in this matter.

*[Signature]*  
Representative for the U.S.  
Environmental Protection Agency,  
Region III

**SECOND MODIFICATION TO THE  
ADMINISTRATIVE ORDER FOR REMOVAL  
RESPONSE ACTIVITIES DATED FEBRUARY 2, 1990**

Having determined the necessity for implementation of response activities at or relating to the Avtex Fibers Site in Front Royal, Warren County, Virginia, ("the Site") the United States Environmental Protection Agency ("EPA"), issued an Administrative Order ("Order") corresponding to EPA Docket No. III-90-12-DC to FMC Corporation ("FMC" or "Respondent") on February 2, 1990. Pursuant to the Order, FMC Corporation has operated a Waste Water Treatment System at the Site from 1990 to the present. Pursuant to Section 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. § 9606(a), EPA hereby modifies Section III ("Findings of Fact") and Section VIII ("Work To Be Performed") and other pertinent sections of the Order as follows:

**I. Modification**

Section III "FINDINGS OF FACT" is modified by adding paragraph 3.36.

3.36 Since EPA began its response actions at the Site, it has, among numerous other cleanup activities, removed and disposed of off-Site hazardous substances and soils containing hazardous substances. EPA has treated hundreds of thousands of gallons of water contaminated with hazardous substances which have collected throughout the Site in various structures. Since 1989, the EPA has issued action memoranda requesting funding to respond to the threats posed at the

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Site. Accompanying these memoranda were determinations by EPA that the Site conditions presented imminent and substantial endangerments to the public health, welfare, or the environment which warranted the removal actions proposed to be taken by the Agency. On September 26, 1997 EPA again determined that conditions at the Site continued to meet the criteria for removal activity. In order to address chemical threats at the Site which had become exacerbated by the continued chemical and physical degradation of the on Site structures, an EPA On Scene Coordinator ("OSC") has been conducting removal actions, responding to the numerous threats posed by the remaining chemicals and hazardous substances within the Avtex facility. On or about October 1, 1998 the EPA and FMC agreed that FMC would take over removal actions at the Site. EPA issues this Modification No. 2 to the Order to facilitate and implement the orderly transition of removal activities from the OSC to FMC.

Section VIII "WORK TO BE PERFORMED" is modified by adding the following new paragraphs.

8.13 Respondent shall remove waste water existing at the Site, as of the date of this Modification No. 2, generated during EPA's past removal activities to the on-Site Waste Water Treatment System. The water to be removed shall be handled in conformity with the treatment standards and procedures set forth in the Order including, but not limited to, the Applicable or Relevant and Appropriate Requirements ("ARARS") set forth in Exhibit "C". The waste water to be removed is located in the Spray Pond North, the Decontamination Basin, concrete holding tanks east of the Decontamination Basin and the Soft Water Pump House Tanks.

8.14 Respondent shall minimize the potential for release of hazardous substances from 6A Viscose Cellar to groundwater by:

- (a) Discharging waste water from 6A Viscose Cellar to the on-Site Waste Water Treatment System in conformity with the Order; (b) Removing contaminated debris and solids, if any are present, from 6A Viscose Cellar to the East Staging Area; and (c) storing such debris and solids.

8.15 Respondent shall remove solids and sludges from waste water storage areas, including the Spray Pond South, the Spray Pond North and the Decontamination Basin and associated concrete holding tanks east of the Decontamination Basin, Soft Water Pump House Tanks north of the Decontamination Basin, and No. 2 Pressing Basement. Those solids and sludges shall be removed to the East Staging Area and managed in a manner which prevents precipitation from coming in contact with them.

8.16 Respondent shall determine the extent of PCB contamination on the outside mezzanine level of the Powerhouse and remove that contamination to levels specified in EPA's PCB Spill Cleanup Policy at 40 C.F.R. Part 761, Subpart G. Field screening methods, such as immunoassay or other appropriate methods, may be proposed to EPA for use in completing this task. EPA will review the proposed method and either approve or disapprove its use. If

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approved, the Respondent shall use quality assurance, quality control, and chain of custody procedures for this sampling method in accordance with the manufacturer's instructions rather than those specified in Section X of this Order.

8.17 Respondent shall manage viscose solids located in the East Staging Area in a manner that prevents, to the extent feasible, their migration from that area.

8.18 Respondent shall cover contaminated soil and debris piles located in the Staging Areas to prevent water from coming into contact with the staged soil and debris until that material is removed from the Site. Any leachate from the staged soil or debris shall be managed in accordance with the provisions of paragraph 8.20, below. The material may be consolidated to limit the area which must be covered. Respondent may remove and dispose of contaminated soil and debris. Any such removal or disposal shall comply with on Site ARARs and be in accordance with off-Site disposal requirements.

8.19 Respondent shall prevent and abate any releases from all waste storage areas. Respondent shall conduct weekly visual inspections of all waste storage areas to ensure that hazardous substances are not being released to the environment. The areas to be inspected include, but are not limited to, Pulp Storage #1, Shipping #2, Shipping #4, Shipping #5, Coal Storage Shed, Creel Room, Chemical House and Staging Areas. The Respondent shall notify EPA expeditiously in the event a release is detected.

8.20 Respondent, as necessary, shall implement and maintain erosion and sedimentation control measures, such as trenches and sumps throughout the Site, so that contaminated water and leachate collected in those areas are not released in an uncontrolled manner. In the event that any of trenches and/or sumps fill with contaminated liquids or if the liquids present a threat of release, Respondent shall remove and/or properly treat and/or dispose of those liquids. Any removal, treatment or disposal of liquids shall be in conformity with the procedures and standards of the Order and ARARS. The trenches and sumps shall be visually inspected weekly to ensure that they are not being filled in.

8.21 Respondent shall monitor and minimize fugitive emissions from the Site which may include covering, wetting or mulching bare soil areas. Respondent shall control fugitive emissions from the Site during FMC's operations to meet state and federal ambient air quality criteria.

8.22 Respondent shall maintain the accessibility of roadways throughout the Site, including but not limited to roadways to Waste Storage Areas, Erosion Control Measures, and Command Structures. These actions may include, but not be limited to, snow removal.

8.23 Within 30 days of the date that this Modification No. 2 to the Order is signed by EPA Respondent shall provide for the electric service to be used at the Site.

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8.24 Respondent shall submit a supplemental Work Plan ("SWP") to the EPA which contains the details, including an expeditious schedule, for accomplishing the items identified in paragraphs 8.13-8.23. above. The requirements and procedures of paragraphs 8.4-8.12 of the Order and other relevant provisions of the Order shall be applicable to the SWP submitted pursuant to the terms of this Modification No. 2. The SWP shall also identify ARARS for the above described actions. The Respondent shall comply with such ARARS unless the EPA determines, in accordance with the National Contingency Plan ("NCP") that an ARAR is impracticable to achieve.

8.25 The work described in paragraphs 8.13 to 8.23, including but not limited to storage and management, shall be deemed complete 30 days after written notice of completion or termination is given by EPA to FMC.

Section IX "DESIGNATED PROJECT COORDINATORS" is modified as follows:

Paragraph 9.1 is modified to reflect the new address of EPA's Project Coordinator. The Project Coordinator for EPA is:

Ms. Bonnie Gross  
U.S. Environmental Protection Agency  
Hazardous Site Cleanup Division (3HS23)  
1650 Arch Street  
Philadelphia, PA 19103-2029

Paragraph 9.1 is further modified as follows:

Within five (5) working days of the effective date of this Modification No. 2, the Respondent shall designate a Project Coordinator for the work to be undertaken pursuant to this Modification No. 2 and shall notify EPA of its designation.

## II. LIMITATION ON MODIFICATION

Except as provided herein, nothing in this Modification No. 2 shall alter or otherwise affect any term or condition set forth in the Order or its Modification No.1.


## III. EFFECTIVE DATE

This Modification No. 2 to the Order is effective on the date that it is signed by the EPA.

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IT IS SO ORDERED.

BY:

  
W. Michael McCabe  
Regional Administrator  
Region III  
U.S. Environmental Protection  
Agency

DATE:

10/16/98

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III

IN THE MATTER OF:

AVTEX FIBERS SITE

FMC Corporation,

Respondent

Docket No.

III-91-48-DC

Proceeding Under Section 106(a)  
of the Comprehensive Environmental  
Response, Compensation, and Liabi-  
lity Act of 1980, as amended by the  
Superfund Amendments and Reauthori-  
zation Act of 1986, 42 U.S.C.  
§ 9606(a)

ADMINISTRATIVE ORDER FOR REMOVAL  
RESPONSE ACTIONS

Having determined the necessity for implementation of response activities at or relating to the Avtex Fibers Site in Front Royal, Virginia, the United States Environmental Protection Agency ["EPA"] hereby Orders as follows:

I. JURISDICTION

- 1.1 This Administrative Order ["Order"] is issued pursuant to the authority vested in the President of the United States by section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ["CERCLA"], 42 U.S.C. § 9606(a), delegated to the Administrator of EPA by Executive Order No. 12580 [52 Fed. Reg. 2923 (January 29, 1987)], and further delegated to the Regional Administrators of EPA. This Order pertains to property located in and around 1169 Kendrick Lane, Front Royal, Warren County, Virginia. The property will hereinafter be referred to as the "Site" or "Avtex Site," and is further described in Section III below.
- 1.2 This Order is issued to FMC Corporation ["Respondent"]. The Respondent shall undertake all actions required by, and comply with all requirements of this Order, including any modifications hereto [the "Work"].

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- 1.3 The Work shall be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan, as amended ["NCP"], 40 C.F.R. Part 300, and CERCLA.

## **II. STATEMENT OF PURPOSE**

- 2.1 In issuing this Order, the objective of EPA is to protect the public health and welfare and the environment by ensuring that a proper removal response action, as defined in section 101(23) of CERCLA, 42 U.S.C. § 9601(23), is conducted to abate, mitigate, and/or eliminate the release or threat of release of hazardous substances at the Site, as hereinafter described, by providing potable water to persons affected by such releases and threatened releases.

## **III. FINDINGS OF FACT**

- 3.1 Respondent FMC Corporation is a corporation organized and existing under the laws of the State of Delaware. FMC Corporation's corporate offices are located at 200 East Randolph Drive, Chicago, Illinois.
- 3.2 On or about August 5, 1963, Respondent purchased a rayon manufacturing facility located on and near 1169 Kendrick Lane, Front Royal, Virginia, on the east bank of the South Fork of the Shenandoah River ["Avtex Site" or "Site"]. On or about August 19, 1976, Avtex Fibers, Inc. purchased the Site from Respondent. By deed dated July 31, 1978, Avtex Fibers, Inc. conveyed the Site to Avtex Fibers-Front Royal, Inc. Avtex Fibers-Front Royal, Inc. is currently the owner of the Site.
- 3.3 Avtex Fibers-Front Royal Inc. is a wholly-owned subsidiary of Avtex Fibers, Inc. The affairs of Avtex Fibers-Front Royal, Inc. are controlled by Avtex Fibers, Inc. Both corporations are referred to as "Avtex." Avtex operated the Site from approximately August 1976 until November 11, 1989, when it ceased operations at the Avtex Site. On or about February 6, 1990, Avtex Fibers, Inc. and Avtex Fiber-Front Royal, Inc. filed Chapter 11 bankruptcy proceedings in the United States Bankruptcy Court for the Eastern District of Pennsylvania.
- 3.4 The Site occupies approximately 440 acres, 60 of which are under roof, and includes 25 separate land disposal basins where wastes from the rayon manufacturing processes were disposed.
- 3.5 The Avtex Site is situated on river alluvial deposits of sand, silt, clay and meta-igneous cobbles. These surficial deposits

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are approximately 10 to 20 feet thick. The river deposits are underlain by the Martinsburg Formation. Locally, this formation consists of massive and fractured greenish-gray shale with occasional void spaces and stringers of silty sandstone. The general direction of groundwater flow through the fractured shale is from the Avtex Site toward the southwest and the Shenandoah River. The groundwater migrating from the vicinity of the viscose basins pushes past the Shenandoah River and migrates to the west bank of the South Fork of the Shenandoah River.

- 3.6 Manufacturing operations at the Avtex Site have included the production of rayon, polyester, and polypropylene fibers. Rayon staple and filament fiber were produced at the facility from the time the plant was constructed in the 1940s through November 1989; polyester fiber was manufactured from 1970-1977; and polypropylene fiber was produced from 1983 until November 1989, when the plant ceased operations. Land disposed waste materials at the Avtex Site originated predominantly from the rayon manufacturing process.
- 3.7 Rayon manufacturing operations at the Avtex Site did not change significantly from the commencement of operations through the plant shutdown in November 1989. The manufacturing operations produced rayon by means of the viscose process. Viscose is an amber colored, syrup-like solution made by treating wood pulp with sodium hydroxide and carbon disulfide. During this process, sheets of wood pulp are crumbled and steeped in a strong solution of caustic soda. The slurry that is formed is dewatered, shredded, and aged before reacting with carbon disulfide to form sodium-cellulose-xanthate. The xanthate is then dissolved in dilute caustic soda to form viscose solution. After aging, filtering, and deaeration, viscose solution is extracted in a sulfuric acid-zinc sulfate bath where the cellulose is regenerated in the form of continuous rayon fibers.
- 3.8 From 1940 until 1983, more than 14,400,000 cubic feet of waste viscose from the manufacturing process was disposed in eleven unlined viscose basins on the Avtex Site. During this period, waste sludge containing zinc from the rayon process also was disposed in unlined sulfate basins at the Site. The sulfate basins contain approximately 1,200 acre feet of sludge containing approximately eighty million pounds of zinc.
- 3.9 In 1982, carbon disulfide, a constituent of the viscose waste, was identified in ground water samples from several wells in a residential area located on the west bank of the Shenandoah River across from the Site ["Rivermont Acres"].

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- 3.10 In December 1983, Avtex agreed with the Virginia State Water Control Board to provide potable water to the residents of the Rivermont Acres area. Avtex provided potable water to these residents through December 1989.
- 3.11 The Site was proposed for inclusion on the CERCLA National Priorities List ["NPL"] in October 1984. On June 1, 1986, the Site was placed on the NPL.
- 3.12 Between August 1986 and August 1988, Respondent and Avtex performed a limited Remedial Investigation/Feasibility Study at the Site pursuant to an administrative order on consent [EPA Docket No. III-86-15-DC] [the "August 1988 RI/FS"]. The purpose of the August 1988 RI/FS was to determine the nature and extent of groundwater contamination in an area of the Site containing the waste basins and to identify the source of this groundwater contamination. The August 1988 RI/FS documented the presence of carbon disulfide, cadmium, lead, hydrogen sulfide, and arsenic in groundwater sampled at the Avtex Site. Carbon disulfide and arsenic were also identified in groundwater on the west side of the Shenandoah River; residential wells at Rivermont Acres were found to be contaminated with these substances. Constituents detected in the viscose materials on Site included arsenic, cadmium, carbon disulfide, lead, and zinc.
- 3.13 On September 30, 1988, EPA issued a first operable unit Record of Decision for the Avtex Site ["ROD I"] based on the results of the August 1988 RI/FS. The ROD I remedy focused on reducing ground water contamination and on implementing interim remedial measures to prevent further releases of hazardous substances from Viscose Basins 9, 10, and 11. The major components of the selected remedy included, among other things, use of existing on-site pumping wells to recover contaminated ground water; installation of modified wells or extraction trenches in Viscose Basins 9, 10, and 11 for dewatering operations; and extraction of ground water and basin liquids for on-site treatment in a waste water treatment plant to be constructed.
- 3.14 On June 30, 1989, EPA issued an Administrative Order directing Avtex and Respondent to implement the remedy selected by EPA in ROD I [EPA Docket No. III-89-19-DC] ["June 1989 Order"]. By letters dated July 20, 1989, Avtex and Respondent notified EPA of their intent to undertake the actions required by the June 1989 Order. On November 14, 1989, EPA received notice from Avtex that it would not be able to carry out its obligations under the June 1989 Order. The work to be performed under the June 1989 Order is continuing, as guaranteed by Respondent.

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- 3.15 On November 9, 1989, the Commonwealth of Virginia revoked Avtex's National Pollutant Discharge Elimination System ["NPDES"] permit and ordered the company to cease all discharges to the Shenandoah River. On November 10, 1989, Avtex discontinued discharging to the Shenandoah River and shut down the entire manufacturing facility.
- 3.16 On December 6, 1989, Avtex informed the OSC that it would no longer voluntarily provide potable water to the residents of Rivermont Acres.
- 3.17 On December 6, 1989, the OSC notified Respondent of its potential liability for the Site and requested that Respondent provide the residents of Rivermont Acres with potable water suitable for drinking, bathing, and cooking. Since approximately May 1990, Respondent has reimbursed the residents of Rivermont Acres for amounts expended by such persons to obtain water.
- 3.18 The groundwater under the Avtex Site is contaminated with, among other things, carbon disulfide, cadmium, lead, hydrogen sulfide, and arsenic. Carbon disulfide and arsenic have been detected in residential wells across the Shenandoah River in the Rivermont Acres development. The contaminated aquifer underlying the Avtex Site is the source of water for residential wells. This water is used for, among other things, bathing, cooking, and washing. The contaminated groundwater migrating from the Avtex Site poses a risk to public health and welfare and to the environment.
- 3.19 Arsenic, cadmium, carbon disulfide, hydrogen sulfide, lead, and zinc are "hazardous substances" within the meaning of section 101(14) of CERCLA, 42 U.S.C. § 9601(14), because they are listed at 40 C.F.R. Part 302, Table 302.4 (1987):
- (a) Arsenic is a known human carcinogen. This contaminant has been associated with skin cancer in humans and can cause skin lesions, peripheral vascular disease, and peripheral neuropathy.
  - (b) Cadmium is a known human carcinogen, which can also cause kidney disease and osteomalacia (brittle bones). Cadmium is also toxic to aquatic life.
  - (c) Carbon disulfide causes birth defects in animals and is a probable cause of birth defects in humans. Carbon disulfide exposure also is associated with increased risk of mortality from coronary heart disease, and it is a neurotoxin in humans.

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- (d) Hydrogen sulfide has been found to cause eye injury, headache, nausea, and insomnia. Acute exposure to high levels may cause unconsciousness and death.
- (e) Lead is potent neurotoxin which causes retardation in the neurobehavioral development of children, and changes in blood enzyme levels at exposures so low that there is no specific threshold. Animal studies show that lead is a probable human carcinogen.

#### IV. CONCLUSIONS OF LAW

- 4.1 The Avtex Site is a "facility" as defined in section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- 4.2 Respondent is a "person" within the meaning of section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- 4.3 "Hazardous substances," as defined in section 101(14) of CERCLA, 42 U.S.C. § 9601(14), have been disposed of at the Avtex Site and are currently present there.
- 4.4 The presence of hazardous substances at the Avtex Site and the past, present, and/or potential migration of hazardous substances from the Avtex Site constitutes an actual and/or threatened "release" as defined in section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- 4.5 Respondent is a "person who at the time of disposal of any hazardous substance owned or operated any facility (the Site) at which hazardous substances were disposed of" within the meaning of section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).
- 4.6 Respondent is liable pursuant to section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

#### V. DETERMINATIONS

Based on the Findings of Fact and Conclusions of Law set forth above, and on the Administrative Record supporting this Order, EPA has determined that:

- 5.1 The actual and/or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health or welfare or to the environment.

- 5.2 The Work is necessary to protect the public health and welfare and the environment.
- 5.3 Because there is a threat or potential threat to public health or welfare or to the environment, a removal action is appropriate to abate, minimize, stabilize, mitigate, or eliminate the release, or threat of release, of hazardous substances at or from the Site.

#### **VI. PARTIES BOUND**

- 6.1 This Order shall apply to and be binding upon Respondent and its agents, successors, and assigns. Neither a change in ownership or corporate or partnership status of Respondent, nor a change in ownership or control of the Avtex Site, will in any way alter Respondent's responsibilities under this Order.
- 6.2 The Respondent shall provide a copy of this Order to all contractors, sub-contractors, laboratories, and consultants retained to conduct any portion of the Work. Respondent shall require in any and all such contracts for any portion of the Work that the Work that is the subject of such contract be performed within the time, and in the manner, set forth in this Order.
- 6.3 No change in ownership of any property covered by this Order shall in any way alter, diminish, or otherwise affect Respondent's obligations and responsibilities under this Order.

#### **VII. NOTICE TO THE STATE**

- 7.1 Notice of issuance of this Order has been given to the Commonwealth of Virginia pursuant to section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

#### **VIII. WORK TO BE PERFORMED**

- 8.1 Respondent shall commence and complete performance of the following Work within the time periods specified herein.
- 8.2 Within five (5) days of the effective date of this Order, Respondent shall contact in writing and/or by telephone each of the Rivermont Acres residents listed in Section 8.7 of this Order to inform such persons that, pursuant to this Order, Respondent shall continue to reimburse such persons for the costs incurred in obtaining water or that Respondent shall

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provide potable water from a source other than the contaminated ground water ["Alternative Water"] to their Rivermont Acres properties ["Properties"].

- 8.3 (a) Except as provided in Section 8.3(b) of this Order, Respondent shall reimburse the Rivermont Acres residents, and their successors-in-interest, for the costs of obtaining water for the Properties in accordance with this paragraph. Respondent shall reimburse each resident within thirty (30) calendar days of receiving receipts documenting the purchase of water by such resident. Respondent's obligation to provide such reimbursements shall continue until EPA determines that a permanent supply of potable water is available to the Properties or EPA requires Respondent to provide water pursuant to Section 8.3(b) of this Order. EPA may at any time require Respondent to provide water pursuant to Section 8.3(b) of this Order. In the event Respondent provides Alternative Water pursuant to Section 8.3 of this Order, Respondent shall not be obligated hereby to reimburse such residents for any water purchased by them.
- (b) In the event Respondent elects to provide the Properties with Alternative Water through means other than that described in Section 8.3(a) of this Order, or EPA requires Respondent to provide such water pursuant to this Section 8.3(b), Respondent shall comply with the requirements of this Section 8.3(b).
- (1) EPA may require Respondent to provide Alternative Water pursuant to this Section 8.3(b) by providing written notice to Respondent.
  - (2) Prior to discontinuing reimbursements as described in Section 8.3(a), Respondent shall submit to EPA for approval a Work Plan which shall describe the manner in which Respondent shall provide Alternative Water to the Properties. The Work Plan shall describe the manner in which Respondent shall provide Alternative Water to the Properties which is of sufficient quantity and quality to satisfy all domestic uses at each of the Properties including, but not limited to, bathing, cooking, and washing. The Work Plan shall contain, at a minimum, the methods by which such Alternative Water shall be provided, the identity and qualifications of the contractors, subcontractors, and supervisory personnel Respondent proposes to retain to provide such Alternative Water, and a plan for complying with Section 8.6 of this Order. The Work Plan shall be subject to approval by EPA

in accordance with Section 8.4 of this Order.

- (3) All contractors, subcontractors, supervisory personnel, and other persons retained to perform Work shall meet the applicable Occupational Safety and Health Administration requirements as defined in 29 C.F.R. § 1910.120. All contractors, subcontractors, supervisory personnel, and other persons who will perform Work; Respondent's Project Coordinator designated pursuant to Section IX of this Order; and any replacements to such persons are subject to EPA disapproval at any time. In the event of any such disapproval by EPA, Respondent shall notify EPA within five (5) calendar days of receipt of such EPA disapproval of the identity and qualifications of the person(s) who will replace the one(s) disapproved by EPA. Persons disapproved by EPA shall not perform any of the Work for which such persons have been disapproved.
  - (4) Respondent shall implement the EPA-approved Work Plan in accordance with this Order and the schedules and requirements contained in the EPA-approved Work Plan. Respondent shall not commence implementation of such Work Plan until receiving written EPA approval to proceed.
- 8.4 All reports, plans, specifications, schedules, and attachments required to be submitted to EPA by Respondent by this Order ["Submissions"] are subject to EPA approval in accordance with this Section.
- (a) EPA will review each Submission and notify Respondent of EPA's approval or disapproval of the Submission. In the event of disapproval, EPA will specify the deficiencies in writing. Respondent shall respond to and correct the deficiencies identified by EPA and resubmit the Submission to EPA within five (5) business days of Respondent's receipt of EPA disapproval, or such longer time as may be specified by EPA.
  - (b) In the event of a subsequent disapproval of the revised Submission, EPA retains the right to submit its own modifications to Respondent, in which case Respondent is hereby required to implement such modifications. Alternatively, EPA may perform the response action, or portions thereof, and seek reimbursement of its costs, and treble damages pursuant to section 107(c) of CERCLA, 42 U.S.C. § 9607(c), from Respondent and/or take any other action authorized by law.

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- (c) All Submissions shall be incorporated into this Order upon approval by EPA. Any non-compliance with such EPA-approved Submission, submission of a deficient revision following EPA disapproval, or non-compliance with EPA-submitted modifications in the case of a subsequent disapproval, shall be considered a failure to comply with the requirements of this Order. Determinations of non-compliance shall be made by EPA. In the event of conflict between this Order and any document attached to, incorporated in, or enforceable hereunder, the provisions of this Order shall control.

8.5 Following EPA approval of any Work Plan submitted pursuant to Section 8.3(b) of this Order, Respondent shall implement such Work Plan in the manner, and according to the schedules, contained in the EPA-approved Work Plan. Respondent's obligation to provide Alternative Water to the Properties shall continue until EPA determines that a permanent supply of potable water is available to the Properties.

8.6 For each month Respondent elects to provide the Properties with Alternative Water from a source other than commercially available bottled water, Respondent shall ensure that such water is sampled and analyzed for potability.

- (a) Respondent shall notify the EPA Project Coordinator designated pursuant to Section IX of this Order two (2) business days prior to each sampling event. Respondent shall provide EPA and its representatives an opportunity to take split samples.

- (b) If EPA concludes that analytical results from the sampling event reveal that the Alternative Water supplied by Respondent is non-potable, Respondent shall provide commercially available bottled water to the Properties until EPA determines that analytical results verify that the Alternative Water initially supplied by Respondent is potable.

8.7 The names and mailing addresses of the residents who maintain full and/or part-time residences at Rivermont Acres and to whom Respondent shall provide potable water at their Rivermont Acres residences pursuant to this Order are:

- (a) William Poland  
Rivermont Acres  
P.O. Box 1124  
Front Royal, VA 22630



- (b) Garland Housden  
2622 Shelby Lane  
Falls Church, VA 22043
- (c) Annabel Hensley  
6701 Halleck Street  
District Heights, MD 20028
- (d) Joseph Swiger  
Route 1  
P.O. Box 4119  
Front Royal, VA 22630

- 8.8 In the event any of the Properties are conveyed during the pendency of this Order, Respondent shall offer to continue to supply each such Property with Alternative Water in accordance with the provisions of this Order. In the event the new owner(s) of any such Property requests that Respondent continue to supply Alternative Water, Respondent shall supply such water in accordance with the requirements of this Order.
- 8.9 (a) In the event Respondent elects to provide the Properties with Alternative Water through the means described in Paragraph 8.3(a) of this Order, Respondent shall comply with the requirements of subparagraph (b), below. In the event Respondent elects to provide the Properties with Alternative Water through means other than those described in Paragraph 8.3(a) of this Order, Respondent shall comply with the requirements of subparagraph (c), below.
- (b) Beginning one hundred and twenty (120) calendar days subsequent to the effective date of this Order, and every one hundred and twenty (120) calendar days thereafter, or longer as may be determined by the EPA Project Coordinator designated pursuant to Section IX, and until EPA advises Respondent that the Work is complete, the Respondent shall provide EPA with a progress report for each preceding one hundred and twenty (120) calendar day period. The progress reports shall include, at a minimum:
- (1) a description of the Work completed and the actions that have been taken toward achieving compliance with this Order;
  - (2) a description of all data anticipated and activities scheduled for the next 120 calendar days;

- (3) a description of any problems encountered or anticipated;
  - (4) any actions taken to prevent or mitigate such problems;
  - (5) a schedule for when such actions will be completed, and
  - (6) copies of all analytical data received during the reporting period.
- (c) Respondent shall comply with all requirements of subparagraph (b), above, except that Respondents shall submit such reports beginning seven (7) calendar days subsequent to the date of receipt of EPA approval of the Work Plan and every seven (7) calendar days thereafter, or longer as may be determined by the EPA Project Coordinator designated pursuant to Section IX of this Order.
- 8.10 Documents, including plans, reports, sampling results and other correspondence to be submitted pursuant to this Order shall be sent by certified or express mail to the EPA Project Coordinator designated pursuant to Section IX.
- 8.11 Respondent shall provide to EPA, upon written request, any and all information and documents in its possession, custody or control resulting from and/or pertaining to Work performed by Respondent including, but not limited to, analytical data (including raw data), Site safety data, Site monitoring data, operational logs, copies of all hazardous waste manifests (including copies of all hazardous waste manifests signed upon receipt of the hazardous wastes by a licensed treatment, storage or disposal facility), the identity of treatment, storage and/or disposal facilities used, the identity of transporters used, the identity of any contractors, subcontractors and supervisory personnel used, information and documents concerning Respondent's compliance with Quality Assurance and Quality Control requirements of this Order, information and documents relating to Respondent's efforts to secure access, and information and documents relating to any project delays. Nothing herein shall be interpreted as limiting the inspection and information-gathering authority of EPA under Federal law.
- 8.12 Respondent shall not handle or remove any hazardous substances from the Site except in conformance with the terms of this Order and all applicable Federal, State, or local laws or regulations as required by the NCP.

- 8.13 Respondent shall not commence any Work except in conformance with the terms of this Order.
- 8.14 Respondent shall immediately notify EPA's Project Coordinator and the National Response Center [(800) 424-8802] in the event of any action or occurrence during the pendency of this Order which causes or threatens to cause an additional release of hazardous substances, pollutants or contaminants on, at, or from the Site, or which may create a danger to public health, welfare or the environment.

#### **IX. DESIGNATED PROJECT COORDINATORS**

- 9.1 Respondent shall designate a Project Coordinator and shall notify EPA of its designated Project Coordinator within five (5) business days of the effective date of this Order. Respondent's Project Coordinator shall be a technical and/or managerial representative of the Respondent and may be a contractor and/or consultant; provided, however, the Respondent's Project Coordinator shall not be its legal representative in this matter. The Project Coordinator for EPA designated pursuant to this Section and the Project Coordinator for the Respondent shall be responsible for overseeing the Work. To the maximum extent possible, communications between the Respondent and EPA and all documents concerning the activities performed pursuant to the terms and conditions of this Order, including plans, reports, approvals, and other correspondence, shall be directed to the Project Coordinators.
- 9.2 The Project Coordinator for EPA is:
- Harry T. Daw (3HW33)  
On-Scene Coordinator  
U.S. Environmental Protection Agency  
Removal Enforcement Section  
841 Chestnut Building  
Philadelphia, PA 19107  
(215) 597-6678
- 9.3 Respondent shall have the right to change its Project Coordinator. Such a change shall be accomplished by notifying the EPA Project Coordinator in writing at least five (5) business days prior to the change.
- 9.4 EPA shall have the right to change its Project Coordinator at any time, without prior notice to Respondent. EPA's intent is to notify Respondent as soon as practicable following any such change of its Project Coordinator.

- 9.5 The EPA Project Coordinator shall have the authority to halt or modify Work or other activities performed by Respondent at the Site to eliminate an actual or potential release or threat of release of hazardous substances. Such direction by the EPA Project Coordinator may be given verbally or in writing. If such direction is given verbally, the EPA Project Coordinator shall later memorialize such direction in writing.
- 9.6 The absence of the EPA Project Coordinator from the Site shall not be cause for the stoppage or delay of Work.

#### **X. QUALITY ASSURANCE**

- 10.1 The Respondent shall use quality assurance, quality control, and chain of custody procedures in accordance with the "EPA NEIC Policies and Procedures Manual" dated May 1978, revised November 1984, EPA Document 330/9-78-001-R, "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans," December 1980, QAMS-005/80, and "QA/QC Guidance for Removal Activities," April 1990, EPA/540/G-90/004, while conducting all sample collection and analysis activities required by this Order. The Respondent shall consult with EPA in planning for, and prior to, all sampling and analysis required by any approved Work Plan. Respondent shall use a laboratory(s) which has a documented Quality Assurance Program that complies with EPA guidance document QAMS-005/80.

#### **XI. SITE ACCESS**

- 11.1 As of the effective date of this Order, Respondent shall provide to EPA and its employees, agents, consultants, contractors, and other authorized and/or designated representatives, for the purposes of conducting and/or overseeing the Work, access to all property owned or controlled by Respondent wherein Work must be undertaken. Such access shall permit EPA and its employees, agents, consultants, contractors, and other authorized and designated representatives to conduct all activities described in paragraph 11.3 of this Order.
- 11.2 To the extent that property wherein Work must be undertaken is presently owned or controlled by parties other than the Respondent, the Respondent shall use its best efforts to obtain site access agreements from the present owners. In the event Respondent elects to provide the Properties with Alternative Water through the means described in Paragraph 8.3(a) of this Order, such access agreements shall be finalized within ten (10) calendar days of the effective date

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of this Order. In the event Respondent elects to provide the Properties with Alternative Water through means other than those described in Paragraph 8.3(a) of this Order, such access agreements shall be finalized within fifteen (15) calendar days of receiving EPA's written notice to proceed. Such agreements shall provide reasonable access, as detailed in paragraph 11.3 below, for EPA and the Respondent and their authorized representatives. In the event that any property owner refuses to provide such access or access agreements are not obtained within the time designated above, whichever occurs sooner, the Respondent shall notify EPA, in writing, within five (5) calendar days of the date such agreements should have been obtained, of all efforts to obtain access and the circumstances of the failure to obtain such access. EPA may then take steps to provide such access. Respondent shall reimburse the United States for all costs incurred in obtaining access which are not inconsistent with the NCP. Best efforts shall include agreement to reasonable conditions for access and/or the payment of reasonable fees.

11.3 EPA and its employees, agents, contractors, consultants and other authorized and designated representatives shall have the authority to enter and freely move about the location where the response actions and/or work is being performed at all reasonable times for the purpose of, inter alia, inspecting Work, inspecting records, operating logs, and contract related to the Site; reviewing the progress of the Respondent in carrying out the terms of this Order; conducting such tests as EPA deems necessary; using a camera, sound recording or other documentary type equipment; and verifying the data submitted to EPA by the Respondent. The Respondent shall permit such persons to inspect and copy all records, files, photographs, documents, and other writings, including all sampling and monitoring data, in any way pertaining to the Work.

11.4 Notwithstanding any provision of this Order, EPA retains all of its access and information-gathering authorities and rights under CERCLA and any other applicable statute or regulation.

#### **XII. EPA RESERVATION OF RIGHTS**

12.1 Except as expressly provided in this Order, EPA reserves all rights, claims, interests, and defenses it may otherwise have, and nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Order, including the right to seek injunctive relief and/or the imposition of statutory penalties.

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- 12.2 As provided by this Order, EPA expressly reserves its right to disapprove of Work performed by Respondent; to halt Work being performed by Respondent if Respondent has not complied with an approved Work Plan or this Order, or at any time EPA deems necessary to protect public health, welfare, or the environment and to perform such Work; to request or require that Respondent perform response actions in addition to those required by this Order. In the event that EPA requires Respondent, and Respondent declines, to correct and/or reperform work that has been disapproved by EPA and/or to perform response in addition to those required by this Order, EPA reserves the right to undertake such actions and seek reimbursement of the costs incurred, and/or to seek any other appropriate relief. In addition, EPA reserves the right to undertake removal and/or remedial actions at any time that such actions are appropriate under the NCP and to seek reimbursement for any costs incurred, and/or take any other action authorized by law.
- 12.3 EPA reserves the right to bring an action against the Respondent for recovery of all oversight and other response costs incurred by the United States related to this Order which are not reimbursed by the Respondent, as well as any other costs incurred by the United States in connection with response actions conducted pursuant to CERCLA at the Site.
- 12.4 This Order concerns certain response actions (Work described in Section VIII, above) concerning the Site. Such response actions might not fully address all contamination at the Site. Subsequent response actions which may be deemed necessary by EPA are not addressed by this Order. EPA reserves all rights including, without limitation, the right to institute legal action against Respondent and/or any other parties, in connection with the performance of any response actions not addressed by this Order.
- 12.5 EPA reserves the right to take enforcement actions, including actions for monetary penalties, for any violation of law, regulation, or of this Order. Failure to comply with this Order subjects Respondent to the assessment of civil penalties of up to \$25,000 per day and/or punitive damages in an amount up to three times the amount of any costs incurred by the United States as a result of such failure pursuant to sections 106(b) and 107(c) of CERCLA, 42 U.S.C. §§ 9606(b) and 9607(c). EPA may also undertake such other actions as it may deem necessary or appropriate for any purpose including, but not limited to, actions pursuant to sections 104 and/or 106 of CERCLA, 42 U.S.C. §§ 9604 and 9606.
- 12.6 Nothing in this Order shall limit the authority of the On-Scene Coordinator as outlined in the NCP and CERCLA.

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### **XIII. OTHER CLAIMS**

- 13.1 Nothing in this Order shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership, or corporation not bound by this Order for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken from the Site.
- 13.2 This Order does not constitute any decision on preauthorization of funds under section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2).
- 13.3 Neither EPA nor the United States, by issuance of this Order, assumes any liability for any acts or omissions by Respondent, or Respondent's employees, agents, contractors, or consultants engaged to carry out any action or activity pursuant to this Order, nor shall EPA or the United States be held as a party to any contract entered into by Respondent or by Respondent's employees, agents, contractors, or consultants engaged to carry out the requirements of this Order.
- 13.4 Nothing herein shall constitute or be construed as a satisfaction or release from liability of Respondent or any other person.

### **XIV. OTHER APPLICABLE LAWS**

- 14.1 All Work shall be undertaken in accordance with the requirements of all applicable local, State, and Federal laws and regulations, as required by the NCP.

### **XV. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION**

- 15.1 The effective date of this Order shall be three (3) business days after it is signed by EPA.
- 15.2 This Order may be modified or amended by EPA. Such amendments shall be in writing and shall have as their effective date the date on which such amendments are signed by EPA. Modifications to any EPA-approved Work Plan and its implementation may be made by the EPA Project Coordinator. Such modifications shall be memorialized in writing by the Project Coordinator.
- 15.3 Any reports, plans, specifications, schedules, or other submissions required by this Order are, upon approval by EPA

incorporated into this Order. Any non-compliance with such EPA-approved reports, plans, specifications, schedules, or other submissions shall be considered non-compliance with the requirements of this Order. Determinations of non-compliance will be made by EPA.

- 15.4 No informal advice, guidance, suggestions or comments by EPA regarding reports, plans, specifications, schedules, or other submissions by the Respondent or the requirements of this Order will be construed as relieving the Respondent of its obligation to obtain formal approval when required by this Order, and to comply with the requirements of this Order unless formally modified.

#### **XVI. LIABILITY OF THE UNITED STATES GOVERNMENT**

- 16.1 Neither the United States Government nor any agency thereof shall be liable for any injuries or damages to persons or property resulting from acts or omissions of Respondent, or of its employees, agents, servants, receivers, successors, or assigns, or of any persons, including, but not limited to firms, corporations, subsidiaries, contractors, or consultants, in carrying out the Work, nor shall the United States Government or any agency thereof be held as a party to any contract entered into by Respondent in carrying out the Work.

#### **XVII. FAILURE TO PERFORM/PERFORMANCE EVENTS**

- 17.1 In the event of an inability or anticipated inability on the part of Respondent to perform any of the actions or Work required by this Order in the time and manner required herein, the Respondent's Project Coordinator shall notify EPA orally within twenty-four (24) hours of such event (or, if the event occurs on a Friday or Saturday, no later than the following Monday) and in writing no later than seven (7) calendar days after Respondent becomes aware of such delay or anticipated delay. Such written notification shall be certified by a Responsible Official of Respondent in accordance with Section XVIII of this Order and shall describe fully the nature of the delay, including how it may affect the Work, Work Plan (if applicable), and schedule; the actions that will be or have been taken to mitigate, prevent, and/or minimize further delay; and the timetable according to which future actions to mitigate, prevent and/or minimize the delay will be taken. Such notification shall not relieve Respondent of any obligation of this Order. The Respondent shall adopt all reasonable measures to avoid and minimize such delay.



- 17.2 Failure by Respondent to carry out any requirement of this Order in accordance with the terms and conditions specified herein may result in the unilateral performance of the required actions by EPA pursuant to applicable authorities, an action to recover treble damages pursuant to CERCLA, and/or the initiation of an enforcement action against Respondent to require Respondent to perform such actions, in addition to any other relief that may be available to EPA pursuant to applicable law.
- 17.3 Nothing in this paragraph or any other provision of this Order shall be construed so as to limit any powers EPA may have under CERCLA, the NCP, or any other law or regulation.

#### **XVIII. CERTIFICATION OF COMPLIANCE**

- 18.1 (a) Unless otherwise required by the terms of this Order, any notice, report, certification, data presentation, or other document submitted by Respondent under or pursuant to this Order, which discusses, describes, demonstrates, or supports any finding or makes any representation concerning Respondent's compliance or non-compliance with any requirement(s) of this Order shall be certified by either a responsible official of the Respondent or by the Project Coordinator for the Respondent. The term "responsible official" means:
- (1) a president, secretary, treasurer or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
  - (2) the manager of one or more manufacturing facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$35 million (in 1987 dollars when the consumer price index was 345.3), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- The responsible official of a partnership or sole proprietorship means the general partner or the proprietor, respectively.
- (b) Any delay described in paragraph 17.1 of this Order, shall be certified by a responsible official of

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**Respondent.**

**18.2 The certification required by paragraph 18.1 of this Order shall be in the following form:**

**"Except as provided below, I certify that the information contained in or accompanying this (specify type of submission) is true, accurate and complete.**

**"As to [the/those] portions of this (specify type of submission) for which I cannot personally verify its accuracy, I certify under penalty of law that this (specify type of submission) and all attachments thereto was prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge, information, and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."**

**Signature: \_\_\_\_\_  
Name(print): \_\_\_\_\_  
Title: \_\_\_\_\_**

**XIX. SHIPMENT OF HAZARDOUS SUBSTANCES**

**19.1 Respondent shall, prior to any off-site shipment of hazardous substances from the Site to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving state and to EPA's Project Coordinator of such shipment of hazardous substances. However, the notification of shipments shall not apply to any such off-site shipments when the total volume of all such shipments will not exceed ten (10) cubic yards.**

**19.2 The notification required by paragraph 19.1 shall be in writing, and shall include the following information, where available:**

- (a) the name and location of the facility to which the hazardous substances are to be shipped;**
- (b) the type and quantity of the hazardous substances to be shipped;**

- (c) the expected schedule for the shipment of the hazardous substances; and
- (d) the method of transportation of the hazardous substances.

Respondent shall notify the receiving state of major changes in the shipment plan, such as a decision to ship the hazardous substances to another facility within the same state, or to a facility in another state.

- 19.3 The identity of the receiving facility and state will be determined by Respondent. Respondent shall provide all relevant information, including information under the categories noted in paragraph 19.1, above, on the off-site shipments, as soon as practicable, but no later than twenty-four (24) hours before the hazardous substances are actually shipped.

#### **XX. NOTICE OF INTENTION TO COMPLY**

- 20.1 Respondent shall notify EPA's Project Coordinator within two (2) business days after the effective date of this Order of Respondent's intention to comply with the terms of this Order. Failure of Respondent to provide notification to EPA's Project Coordinator of intent to comply within this time period shall be deemed a violation of this Order by Respondent.

#### **XXI. OPPORTUNITY TO CONFER WITH EPA**

- 21.1 Not later than three (3) business days from the effective date of this Order, Respondent may confer with EPA to discuss this Order. Such conference is not an adversarial hearing or part of a proceeding to challenge this Order, and no official stenographic record of such conference shall be kept.

#### **XXII. ADMINISTRATIVE RECORD**

- 22.1 The Administrative Record upon which this Order is issued is available for review by Respondent's representatives at Respondent's request. Requests to review the Administrative Record shall be submitted to the EPA Project Coordinator designated pursuant to Section IX of this Order.

**XXIII. DEFINITIONS**

- 23.1 "Business days" as used in this Order shall mean every day of the week except Saturdays, Sundays and federal holidays.
- 23.2 "Calendar Days" as used in this Order shall mean every day of the week, including Saturdays, Sundays and federal holidays.
- 23.3 "Work as used in this Order shall mean all requirements of this Order, including any modifications hereto.
- 23.4 All terms not defined herein shall have the meanings set forth in CERCLA and the NCP.

**XXIV. TERMINATION AND SATISFACTION**

- 24.1 The Respondent's obligations to EPA under this Order shall terminate and be deemed satisfied upon the Respondent's receipt of written notice from EPA that the Respondent has demonstrated, to the satisfaction of EPA, that all the terms of this Order have been satisfactorily completed.

**IT IS SO ORDERED.**

By:



**Edwin B. Erickson  
Regional Administrator  
Region III  
U.S. Environmental Protection Agency**

Date: **OCT 22 1991**

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